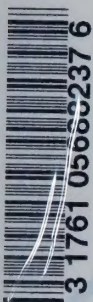


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Report: AQRB-81-026-T

RESULTS OF THE
CANADIAN AIR AND
PRECIPITATION MONITORING
NETWORK APN:
JULY 1979 TO JUNE 1980

by

L.A. BARRIE, H.A. WIEBE,
P. FELLIN AND K. ANLAUF

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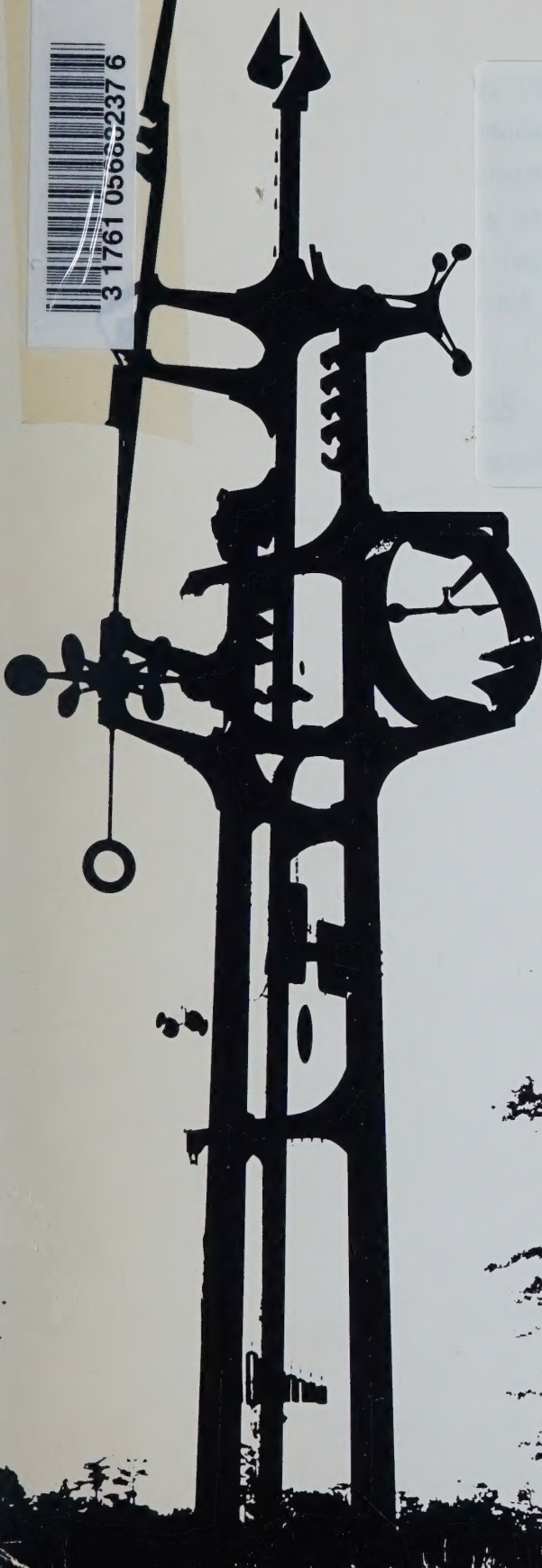


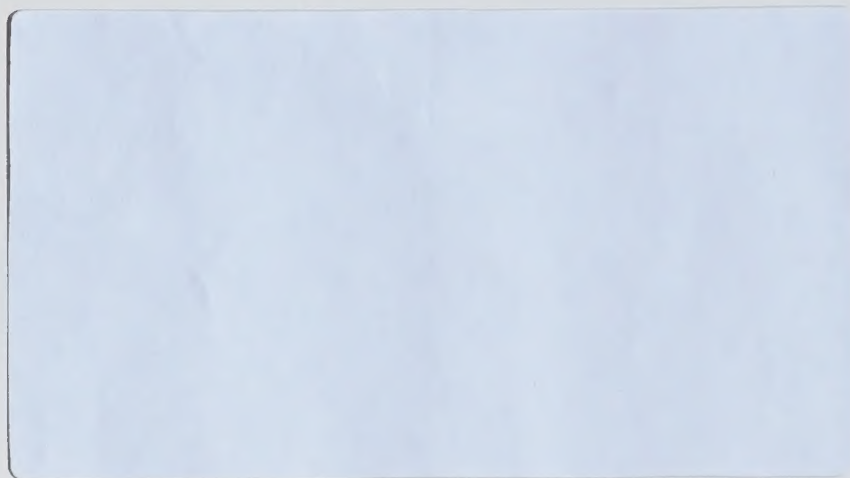
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June 1981

This one of a series of internal reports prepared in the Atmospheric Research Division. It is an unpublished manuscript.

The views expressed in this document reflect the opinion of the individual contributors and do not necessarily represent the official position of the Atmospheric Environment Service.

Air Quality and Inter-Environmental Research Branch
Atmospheric Environment Service
Downsview, Ontario, Canada



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INTRODUCTION

The air and precipitation monitoring network (APN) which began operation in November 1978 has continued to yield information on the concentration of acid-related substances in daily air and precipitation samples. Presently, the network consists of six regionally representative sites in eastern Canada (Figure 1). Covering the period July 1979 to June 1980, this report presents results from five sites of which all but one (Toronto CN Tower) are still operating. For a detailed description of network operations and results for the period November 1978 to June 1979, the reader is referred to the publication by Barrie et al. (1980a).

STATUS OF THE NETWORK

Operational periods for sampling of air and precipitation at each site are summarized in Table 1. Of all the stations ELA-Kenora and Chalk River have been in operation the longest (since November 1978). Air sampling at Toronto CN Tower was terminated in August 1980 since that location is more representative of a local, urban area than of a regional, rural one. Two new sites were added in the autumn of 1980:

- (1) Algoma, at the Turkey Lake watershed near Sault Ste. Marie, and
- (2) Quebec-Montmorency at Forêt Montmorency, 50 km north of Quebec City.

Particulars on the locations and site operating authorities are given in Table 2.

Future plans include another site in Newfoundland to be established sometime in late 1981.

RESULTS

The daily average concentration of particulate major ions and gaseous sulphur dioxide in air as well as the concentrations of major ions in daily precipitation samples are tabulated in Appendices 1 to 5 for

ELA-Kenora, Chalk River, Long Point, Toronto CN Tower and Kejimikujik. A statistical summary accompanies each monthly tabulation.

Before utilizing this data the following factors should be considered:

1. the reported atmospheric particulate nitrate concentrations are somewhat uncertain. It is known from our laboratory tests (Fellin et al., 1980) that under high temperature conditions typical of summertime they represent total airborne nitrate, that is, nitric acid gas plus particulate nitrate. The reported nitrate may also include some artifact nitrate from nitrogen dioxide but it appears to be negligible compared to the other nitrates. Evaluation of the measurement technique under wintertime conditions of low temperature and humidity has not been completed. Hence, it is not yet known what the reported nitrate concentrations mean during the colder half of the year. This problem will be resolved shortly.
2. Reporting of atmospheric potassium concentrations has been terminated since measurements reveal that they are highly susceptible to operator contamination at the monitoring site. If contamination is avoided concentrations are usually below the detection limit of $0.5 \mu\text{g m}^{-3}$.
3. The routine measurement of precipitation pH in the field was terminated at the end of June 1980 because the quality control of these measurements could not be adequately ensured. It will be supplanted by more precise on-site studies of precipitation chemistry conducted by precipitation chemists on a special studies basis.

The data presented has been analyzed and discussed elsewhere (Barrie et al., 1980b; Barrie, 1981). In late 1981, results of a very detailed analysis of the air and precipitation data will be published. This will include estimates of wet and dry deposition rates at each APN site as well as classification of air parcel origins using calculated meteorological back-trajectories.

SUMMARY

Measurements of the concentrations of acid-related substances in air and precipitation on a routine basis provides us with a data set that has many applications. These include the estimation of atmospheric inputs to sensitive receptors, the validation of atmospheric long-range transport models and the study of atmospheric transformation and removal processes. This report presents data collected at five rural locations in eastern Canada for one year (July 1979 - June 1980). A detailed analysis and meteorological interpretation of the data is published elsewhere.

ACKNOWLEDGEMENTS

We are indebted to D. Brymer for installation and maintenance of field equipment, A. Gaudenzi for supervising the field operations, J. Kovalick for data processing and Y. Tham for chemical analysis. Also, we appreciate the efforts of the on-site operators: K. Beaty and D. Braun at ELA; D. Wildsmith at Chalk River; Mr. and Mrs. Brown at Long Point and J. Gorman at Kejimikujik National Park.

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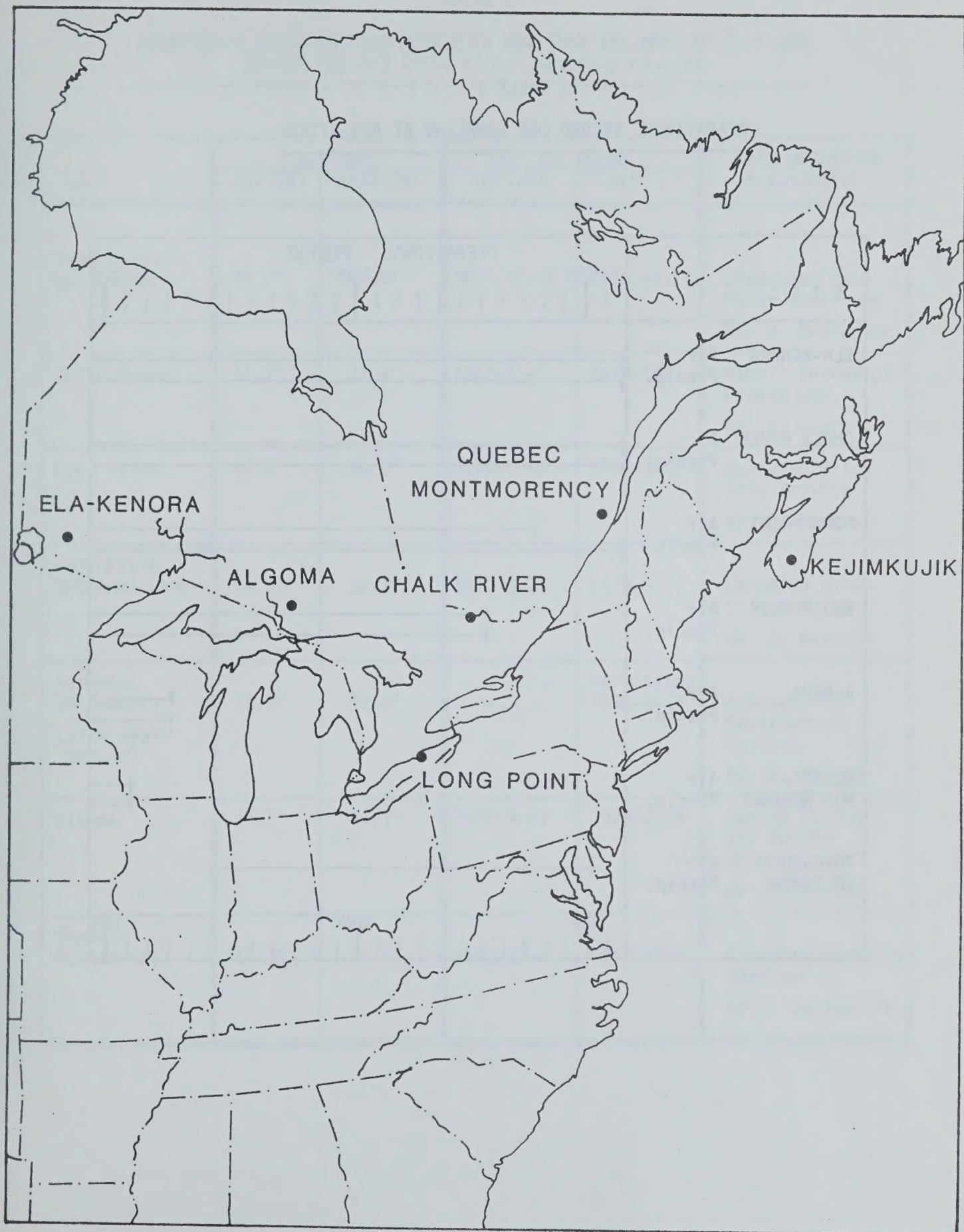


FIGURE 1 - Location of APN sites operating on January 1, 1981

OPERATIONAL RECORD FOR SAMPLING AT APN SITES

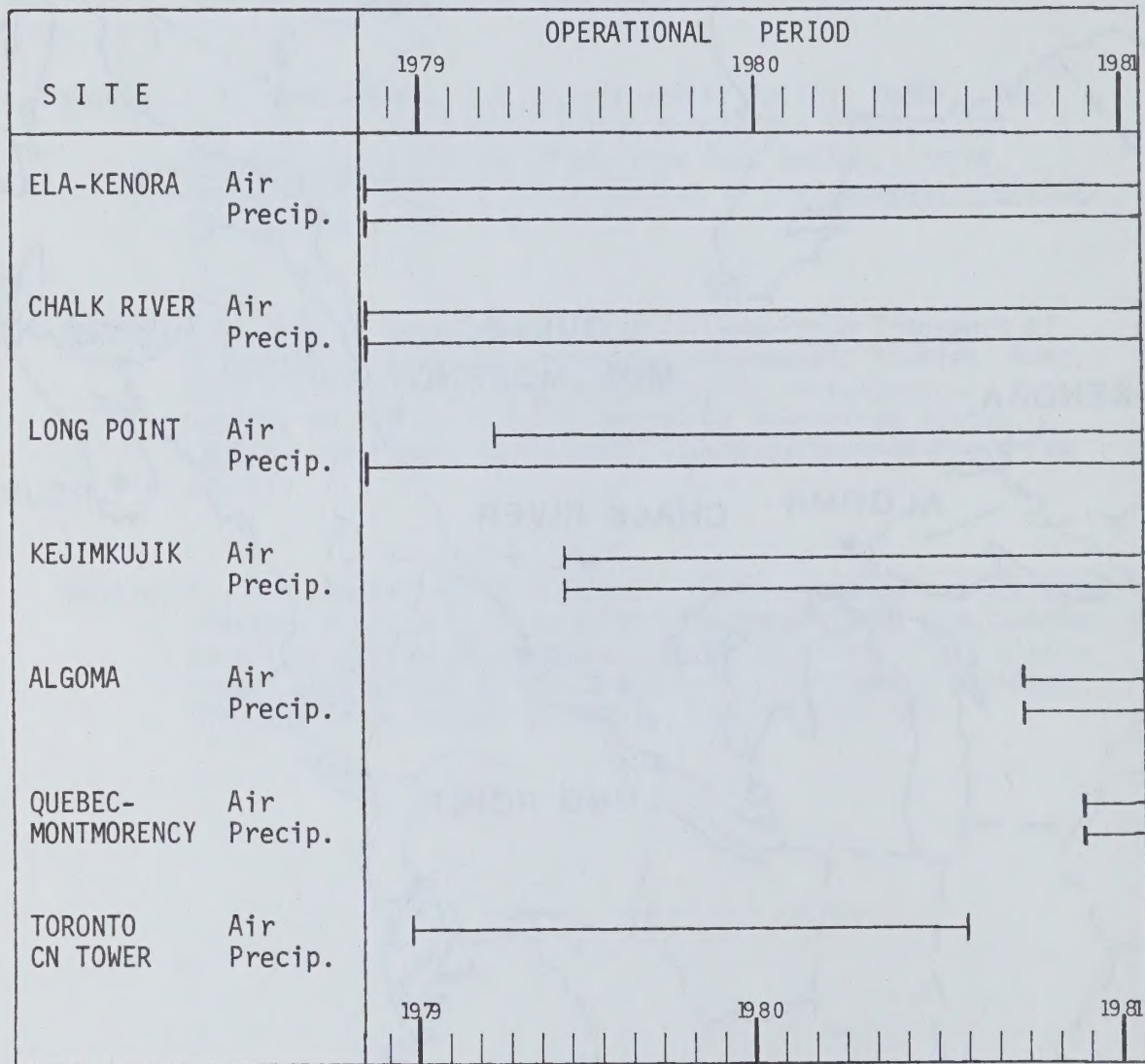


TABLE 2

LOCATION, SITE OPERATING AUTHORITY AND STARTING DATE OF SAMPLING
PERIOD FOR APN SITES (Site Locations Fig. 2)

SITE	LOCATION		SAMPLING BEGAN		SITE OPERATION & AUTHORITY
	LAT. (N)	LONG. (W)	PRECIP.	AIR	
Experimental Lakes Area	49.7°	93.9°	1978-11-15	1978-11-15	Canadian Fresh Water Institute Dr. D. Schindler
Chalk River	46.1°	77.4°	1978-11-1	1978-11-1	Atomic Energy of Canada Ltd. Dr. P. Barry
Long Point	42.6°	80.5°	1978-11-6	1979-3-12	Canadian Wild- life Service Mr. P. Madore
Kejimikujik National Park	44.4°	65.2°	1979-5-11	1979-5-11	Canadian Wild- Life Service Dr. J. Kerekes
Toronto CN Tower (347m above ground)	43.7°	79.4°	-	Terminated 1980-8-19	Atmospheric Environment Service Dr. K. Anlauf
Algoma	47.1°	84.1°	1978-9-29	1978-9-29	Canada Centre for Inland Waters Mr. R. Semkin
Quebec- Montmorency	47.3°	71.2°	1980-12-4	1980-12-4	Canadian Forestry Service Dr. G. Robitaille

APPENDIX 1

MONTHLY SUMMARIES OF
MEASURED CONCENTRATIONS
IN AIR AND PRECIPITATION
AT THE EXPERIMENTAL LAKE
AREA (ELA).

ELA-KENORA

JULY 1979

AIR CONCENTRATIONS (10^{-6} gm^{-3})						GAS
PARTICULATE						
DAY	$\text{SO}_4^{=}$	NO_3^-	Cl^-	Na^+	NH_4^+	SO_2
1	0.22	bd1	bd1	bd1	bd1	bd1
2	0.50	0.32	bd1	bd1	bd1	bd1
3	0.13	bd1	bd1	0.23	bd1	bd1
4	bd1	0.13	bd1	bd1	bd1	bd1
5	0.26	0.30	bd1	bd1	bd1	bd1
6	0.83	0.59	bd1	bd1	0.72	0.5
7	3.08	1.37	0.54	bd1	1.47	1.3
8	6.00	1.06	0.78	bd1	2.40	0.7
9	2.20	0.66	0.62	bd1	1.03	bd1
10	1.07	0.50	0.51	bd1	0.79	bd1
11	1.87	0.77	bd1	bd1	1.10	1.4
12	6.07	1.36	bd1	bd1	2.63	0.8
13	2.47	0.70	bd1	bd1	1.33	bd1
14	0.46	0.24	bd1	bd1	bd1	bd1
15	bd1	bd1	0.66	bd1	bd1	bd1
16	0.34	0.14	0.52	bd1	bd1	bd1
17	0.99	0.49	bd1	bd1	bd1	1.5
18	1.76	0.41	bd1	bd1	0.60	1.2
19	1.25	0.31	bd1	bd1	0.91	bd1
20	1.93	0.80	bd1	bd1	1.08	0.5
21	1.22	0.39	bd1	bd1	0.77	0.7
22	3.04	0.55	bd1	bd1	1.32	2.2
23	3.07	0.45	bd1	bd1	1.42	2.5
24	0.65	0.10	bd1	bd1	bd1	bd1
25	0.23	bd1	bd1	bd1	bd1	1.9
26	0.37	0.11	bd1	bd1	bd1	0.6
27	1.32	0.52	bd1	bd1	0.90	3.6
28	1.45	0.70	bd1	bd1	1.01	1.6
29	1.61	0.69	bd1	bd1	1.01	bd1
30	0.50	0.12	bd1	bd1	bd1	1.2
31	bd1	bd1	bd1	bd1	bd1	-

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	31	-	-	31	30
A. MEAN	1.45	0.45	-	-	0.66	0.7
S.D.	1.54	0.37	-	-	0.73	0.9
MIN.	bd1	bd1	-	-	bd1	bd1
MAX.	6.07	1.37	-	-	2.63	3.6

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		FIELD	LAB	(10 ⁻³ g l ⁻¹)										ION BAL. RATIO +VE/-VE	PRECIP TYPE
	STD (mm)	COLL (mm)			SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P			
12	0.8	0.3	-	-	-	-	-	-	-	-	-	-	-	-	1	
13	4.4	4.1	-	4.90	1.9	1.027	0.2	0.15	0.297	0.05	0.09	0.07	0.024	0.76	1	
14	5.2	5.9	-	5.60	0.6	0.248	0.1	0.10	0.068	0.05	0.02	0.05	0.013	0.80	1	
18	0.8	0.3	-	-	9.5	-	2.2	-	-	-	-	-	-	-	1	
23	2.6	2.4	-	5.50	2.2	1.718	0.3	0.50	0.788	0.14	-	-	-	-	1	
24	0.1	0.6	-	-	2.2	-	0.6	-	-	-	-	-	-	-	1	
25	3.8	3.9	-	4.70	0.4	0.930	bd1	0.12	0.156	0.04	0.04	0.02	0.022	-	1	
29	3.0	3.3	-	5.40	1.1	2.346	0.1	0.27	0.757	0.06	0.10	0.10	0.039	-	1	
TOTAL PRECIP	20.7	20.8														
NO. OBS.	8	8	-	-	7	-	7	-	-	-	-	-	-	-	-	
A. MEAN	2.6	2.6	-	-	2.6	-	0.5	-	-	-	-	-	-	-	-	
STD. DEV.	1.9	2.1	-	-	3.1	-	0.8	-	-	-	-	-	-	-	-	
MINIMUM	0.1	0.3	-	-	0.4	-	bd1	-	-	-	-	-	-	-	-	
MAXIMUM	5.2	5.9	-	-	9.5	-	2.2	-	-	-	-	-	-	-	-	
P.W. MEAN			-	-	1.5	-	0.2	-	-	-	-	-	-	-	-	

PRECIP TYPE
 1 - RAIN
 2 - SNOW
 3 - MIXED
 4 - UNCERTAIN

T - TRACE AMOUNT

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
 IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

ELA-KENORA

AUGUST 1979

AIR CONCENTRATIONS (10^{-6}gm^{-3})
PARTICULATE

DAY	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	GAS SO ₂
1	0.81	0.34	bd1	bd1	0.75	-
2	0.90	0.23	bd1	bd1	0.70	-
3	0.39	bd1	bd1	bd1	bd1	-
4	0.38	bd1	bd1	bd1	bd1	-
5	1.47	bd1	bd1	bd1	0.55	-
6	2.22	0.58	bd1	bd1	1.02	-
7	0.84	0.08	bd1	bd1	bd1	0.6
8	0.49	0.08	bd1	bd1	bd1	0.8
9	0.43	0.23	bd1	bd1	0.61	1.3
10	0.53	0.08	bd1	0.20	0.72	0.6
11	1.50	0.30	bd1	bd1	1.14	0.7
12	1.39	0.30	bd1	bd1	1.06	0.6
13	bd1	bd1	bd1	bd1	bd1	bd1
14	bd1	bd1	bd1	bd1	bd1	0.7
15	0.47	0.23	bd1	bd1	0.55	0.4
16	3.03	1.17	bd1	bd1	1.71	bd1
17	2.48	0.62	0.60	0.31	1.57	1.2
18	1.82	0.22	bd1	bd1	1.14	1.1
19	1.15	0.13	bd1	bd1	0.71	bd1
20	-	-	-	-	-	0.6
21	6.09	0.68	bd1	bd1	2.06	1.0
22	4.93	0.67	bd1	bd1	1.96	2.8
23	bd1	bd1	bd1	bd1	bd1	2.2
24	0.73	0.10	bd1	bd1	bd1	1.5
25	0.79	bd1	bd1	bd1	bd1	0.5
26	0.24	0.14	bd1	bd1	bd1	bd1
27	-	-	-	-	-	0.7
28	0.88	0.34	bd1	bd1	bd1	1.2
29	0.69	0.10	bd1	bd1	bd1	0.8
30	0.23	bd1	bd1	bd1	bd1	bd1
36	1.89	0.58	bd1	bd1	0.82	1.7

bd1 - BELOW DETECTION LIMIT

NO. OBS.	29	29	-	-	29	25
A. MEAN	1.27	0.25	-	-	0.59	0.8
S.D.	1.41	0.28	-	-	0.65	0.7
MIN.	bd1	bd1	-	-	bd1	bd1
MAX.	6.09	1.17	-	-	2.06	2.8

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10^{-3}gl^{-1})ION BAL.
RATIO PRECIP
+VE/-VE TYPE

DAY	AMOUNT		PH		SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO	PRECIP
	STD (mm)	COLL (mm)	FIELD	LAB										+VE/-VE	TYPE
1	0.6	0.1	-	-	2.6	-	1.3	-	-	-	-	-	-	-	1
3	1.4	0.9	-	4.80	0.7	1.195	0.1	-	0.091	-	-	-	-	-	1
6	9.2	8.8	5.70	6.40	2.1	2.435	0.2	1.17	1.133	0.04	1.50	0.09	-	-	1
11	8.7	9.0	5.07	6.00	1.4	1.018	0.1	0.35	0.595	0.08	0.05	0.09	0.028	1.16	1
13	2.0	0.8	-	-	1.3	-	0.2	0.42	-	0.08	-	-	-	-	1
21	1.8	2.0	-	5.10	4.5	1.771	0.3	0.40	0.571	0.11	-	-	-	-	1
22	13.8	14.5	5.30	5.10	0.6	0.221	0.1	0.02	0.027	bd1	bd1	0.03	0.007	-	1
23	1.6	0.7	-	-	-	-	-	-	-	-	-	-	-	-	1
24	2.0	1.6	-	4.30	1.1	-	0.1	0.12	-	0.02	-	-	-	-	1
26	2.0	1.0	-	-	1.1	-	0.2	0.75	-	0.07	-	-	-	-	1
28	2.5	1.2	-	4.40	1.7	-	0.2	0.34	-	0.08	-	-	-	-	1
30	3.8	4.2	-	5.10	1.1	1.461	0.2	0.38	0.292	0.08	0.10	0.10	-	1.09	1
31	3.6	2.9	-	5.60	1.6	1.948	0.2	0.58	0.904	0.12	-	-	0.073	-	1
TOTAL PRECIP	53.0	47.7													
NO. OBS.	13	13	-	-	12	-	12	10	-	10	-	-	-	-	-
A. MEAN	4.1	3.7	-	-	1.7	-	0.3	0.45	-	0.07	-	-	-	-	-
STD. DEV.	4.0	4.4	-	-	1.1	-	0.3	0.32	-	0.04	-	-	-	-	-
MINIMUM	0.6	0.1	-	-	0.6	-	0.1	0.02	-	bd1	-	-	-	-	-
MAXIMUM	13.8	14.5	-	-	4.5	-	1.3	1.17	-	0.12	-	-	-	-	-
P.W. MEAN			-	-	1.4	-	0.2	0.44	-	0.05	-	-	-	-	-

PRECIP TYPE
 1 - RAIN
 2 - SNOW
 3 - MIXED
 4 - UNCERTAIN

T - TRACE AMOUNT

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
 IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

ELA-KENORA

SEPTEMBER 1979

AIR CONCENTRATIONS (10^{-6} gm^{-3})						
DAY	PARTICULATE					GAS SO_2
	$\text{SO}_4^{=}$	NO_3^-	Cl^-	Na^+	NH_4^+	
1	1.66	0.51	bd1	bd1	0.58	0.5
2	0.18	bd1	bd1	bd1	bd1	1.0
3	0.60	0.12	bd1	bd1	bd1	2.1
4	3.48	0.96	bd1	bd1	1.59	bd1
5	0.75	0.31	bd1	bd1	bd1	1.2
6	0.20	0.09	bd1	bd1	bd1	bd1
7	0.74	0.10	bd1	bd1	bd1	0.8
8	0.71	0.47	bd1	bd1	bd1	0.9
9	0.61	0.30	bd1	bd1	bd1	0.5
10	0.12	0.10	bd1	bd1	bd1	bd1
11	0.35	0.17	bd1	bd1	bd1	2.7
12	0.50	0.18	bd1	bd1	bd1	0.4
13	0.38	bd1	bd1	0.30	bd1	bd1
14	0.68	0.20	bd1	bd1	0.57	1.4
15	0.50	0.13	bd1	bd1	bd1	0.9
16	0.82	0.44	bd1	bd1	bd1	1.0
17	0.44	0.16	bd1	bd1	bd1	bd1
18	0.21	bd1	bd1	bd1	bd1	bd1
19	0.58	0.14	bd1	bd1	bd1	bd1
20	bd1	bd1	bd1	bd1	bd1	bd1
21	0.23	bd1	bd1	bd1	bd1	0.5
22	0.38	0.24	bd1	bd1	bd1	0.8
23	2.52	1.71	bd1	bd1	1.11	1.9
24	0.73	0.32	bd1	bd1	bd1	bd1
25	0.21	0.11	bd1	bd1	bd1	bd1
26	1.14	0.53	bd1	bd1	0.71	0.5
27	1.66	0.69	bd1	bd1	0.82	0.5
28	0.37	bd1	bd1	bd1	bd1	bd1
29	0.52	0.17	bd1	bd1	bd1	bd1
30	0.64	0.16	bd1	bd1	bd1	0.7

bd1 - BELOW DETECTION LIMIT

NO. OBS.	30	30	-	-	-	30
A. MEAN	0.73	0.28	-	-	-	0.6
S.D.	0.74	0.35	-	-	-	0.7
MIN.	bd1	bd1	-	-	-	bd1
MAX.	3.48	1.71	-	-	-	2.7

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		PH	FIELD LAB	(10 ⁻³ g l ⁻¹)								TOT P	ION BAL. RATIO +VE/-VE	PRECIP TYPE
	STD (mm)	COLL (mm)			$\text{SO}_4^{=}$	NO_3^-	Cl^-	Ca^{++}	NH_4^+	Mg^{++}	Na^+	K^+			
1	3.3	3.1	-	5.00	0.7	0.797	0.2	0.22	0.216	0.04	-	-	0.043	-	1
3	0.8	0.7	-	-	2.1	-	0.4	-	-	0.19	-	-	-	-	1
10	7.3	6.8	-	5.00	1.3	1.284	0.1	0.28	0.345	0.06	0.08	0.08	0.049	1.04	1
13	3.2	2.2	-	5.10	0.8	0.310	0.1	0.26	0.124	0.05	-	-	-	-	1
17	2.4	2.2	-	5.70	2.1	1.771	0.2	-	0.549	-	0.30	0.20	0.110	-	1
20	2.0	0.7	-	4.70	3.1	-	0.3	-	-	-	-	-	-	-	1
26	10.6	10.4	5.30	6.00	6.2	5.401	0.2	2.00	2.009	0.40	0.15	0.28	0.167	1.15	1
TOTAL PRECIP	29.6	26.1													
NO. OBS.	7	7	-	6	7	-	7	-	-	-	-	-	-	-	
A. MEAN	4.2	3.7	-	5.07	2.3	-	0.2	-	-	-	-	-	-	-	
STD. DEV.	3.5	3.6	-	5.16	1.9	-	0.1	-	-	-	-	-	-	-	
MINIMUM	0.8	0.7	-	4.70	0.7	-	0.1	-	-	-	-	-	-	-	
MAXIMUM	10.6	10.4	-	6.00	6.2	-	0.4	-	-	-	-	-	-	-	
P.W. MEAN			-	5.19	3.1	-	0.2	-	-	-	-	-	-	-	

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
2 - SNOW
3 - MIXED
4 - UNCERTAIN

DAY () - DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

ELA-KENORA

OCTOBER 1979

AIR CONCENTRATIONS (10^{-6} gm^{-3})
PARTICULATE

DAY	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	GAS SO ₂
1	0.66	bd1	bd1	bd1	bd1	bd1
2	0.65	0.08	bd1	0.16	bd1	bd1
3	bd1	bd1	bd1	bd1	bd1	bd1
4	0.40	0.14	bd1	bd1	bd1	bd1
5	0.25	bd1	bd1	bd1	bd1	bd1
6	0.45	bd1	bd1	bd1	bd1	bd1
7	0.93	0.38	bd1	bd1	0.68	bd1
8	0.26	bd1	bd1	bd1	bd1	bd1
9	0.39	bd1	bd1	bd1	bd1	0.5
10	0.64	0.21	bd1	bd1	bd1	bd1
11	0.18	bd1	bd1	bd1	bd1	bd1
12	0.65	bd1	bd1	bd1	bd1	0.4
13	0.77	0.27	bd1	bd1	bd1	bd1
14	0.92	0.54	bd1	bd1	0.54	0.5
15	1.39	0.99	bd1	bd1	0.68	1.0
16	0.82	0.26	bd1	bd1	bd1	bd1
17	0.27	0.09	bd1	bd1	bd1	0.8
18	4.89	2.89	bd1	bd1	2.37	bd1
19	2.39	1.84	bd1	bd1	1.42	0.5
20	1.32	1.23	bd1	bd1	0.76	0.5
21	bd1	bd1	bd1	bd1	bd1	0.6
22	0.39	bd1	bd1	bd1	bd1	0.7
23	0.43	bd1	bd1	bd1	bd1	bd1
24	0.19	bd1	bd1	bd1	bd1	bd1
25	0.81	bd1	bd1	bd1	bd1	bd1
26	1.28	0.32	bd1	bd1	bd1	1.6
27	2.03	1.95	bd1	bd1	1.16	bd1
28	1.48	0.17	bd1	bd1	bd1	bd1
29	2.95	0.55	bd1	bd1	0.70	bd1
30	0.83	bd1	bd1	bd1	bd1	bd1
31	bd1	bd1	bd1	bd1	bd1	1.1

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	31	-	-	-	-
A. MEAN	0.92	0.38	-	-	-	-
S.D.	1.01	0.70	-	-	-	-
MIN.	bd1	bd1	-	-	-	-
MAX.	4.89	2.89	-	-	-	-

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10^{-3} g l^{-1})

(10 ⁻³ gl ⁻¹)														ION BAL.	
DAY	AMOUNT		pH		SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO +VE/-VE	PRECIP TYPE
	STD (mm)	COLL (mm)	FIELD	LAB											
2	4.2	3.1	-	5.80	2.2	1.549	0.3	0.85	0.631	0.17	0.57	0.20	0.229	1.50	1
3	2.8	0.6	-	-	1.1	-	0.2	1.20	-	0.30	-	-	-	-	1
5	1.1	0.3	-	-	1.1	-	0.3	2.00	-	0.30	-	-	-	-	1
8	2.0	1.8	-	5.80	0.5	0.089	0.2	0.40	0.120	0.07	-	-	0.098	-	1
10	8.2	6.5	-	5.10	0.8	0.398	0.1	0.20	0.173	0.03	bd1	0.03	0.019	-	1
18	4.6	4.0	-	6.00	4.1	3.719	0.1	0.95	2.009	0.14	0.08	0.16	0.059	1.17	1
19	11.5	9.9	4.70	4.60	1.3	1.284	0.1	0.16	0.270	0.02	bd1	0.04	0.013	-	1
26	0.8	0.7	-	-	2.0	-	0.4	-	-	-	-	-	-	-	1
30	29.4	26.2	4.60	4.60	1.0	1.018	0.1	0.12	0.234	0.01	bd1	0.04	0.004	-	1
31	36.0	28.8	4.80	4.70	1.3	0.664	0.1	0.14	0.076	0.01	bd1	bd1	0.016	-	1

TOTAL PRECIP	100.6	81.9
NO. OBS.	10	10
A. MEAN	10.1	8.2
STD. DEV.	12.5	10.6
MINIMUM	0.8	0.3
MAXIMUM	36.0	28.8
P.W. MEAN	-	-

PRECIP TYPE
 1 - RAIN
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T - TRACE AMOUNT

DAY() - DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
 IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

ELA-KENORA

NOVEMBER 1979

DAY	AIR CONCENTRATIONS (10^{-6} gm^{-3})					GAS SO_2
	PARTICULATE					
	$\text{SO}_4^=$	NO_3^-	Cl^-	Na^+	NH_4^+	
1	0.33	bd1	bd1	bd1	bd1	bd1
2		bd1	bd1		bd1	0.5
3	1.22	0.25	bd1	bd1	bd1	0.7
4	1.13	0.64	bd1	bd1	bd1	0.7
5	1.29	bd1	bd1	bd1		bd1
6	1.51	0.83	bd1	bd1	0.63	bd1
7	0.77	0.10	bd1	bd1	bd1	bd1
8	0.56	bd1	bd1	bd1		bd1
9	0.51	0.09	bd1	bd1	bd1	bd1
10	0.79	0.28	bd1	bd1	bd1	-
11	1.73	1.13	bd1	bd1	0.78	bd1
12	1.18	0.97	bd1	bd1	bd1	0.8
13	0.66	0.19	bd1	bd1	bd1	0.5
14	3.31	1.46	bd1	bd1	1.55	0.7
15	1.73	0.84	bd1	bd1	0.86	bd1
16	1.31	1.81	bd1	bd1	0.95	1.2
17	1.02	1.35	bd1	bd1	0.70	1.4
18	2.10	5.58	bd1	bd1	2.10	2.4
19	1.75	2.53	bd1	bd1	0.87	0.5
20	0.74	0.96	bd1	bd1	bd1	1.6
21	0.63	0.63	bd1	bd1	bd1	3.5
22	0.40	0.26	bd1	bd1	bd1	0.7
23	0.80	0.33	bd1	bd1	bd1	bd1
24	1.26	0.50	bd1	bd1	bd1	bd1
25	1.66	0.82	bd1	bd1	bd1	bd1
26	-	-	-	-	-	-
27	0.30	bd1	bd1	bd1	bd1	bd1
28	0.81	bd1	0.36	0.19	bd1	bd1
29	0.56	bd1	bd1	bd1	bd1	0.7
30	0.30	bd1	bd1	bd1	bd1	bd1

bd1 - BELOW DETECTION LIMIT

NO. OBS.	29	29	-	-	-	28
A. MEAN	1.05	0.74	-	-	-	0.6
S.D.	0.68	1.12	-	-	-	0.8
MIN.	bd1	bd1	-	-	-	bd1
MAX.	3.31	5.58	-	-	-	3.5

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		PH	FIELD	LAB	(10^{-3} gl^{-1})								TOT P	ION BAL. RATIO +VE/-VE	PRECIP TYPE
	STD (mm)	COLL (mm)				$\text{SO}_4^=$	NO_3^-	Cl^-	Ca^{++}	NH_4^+	Mg^{++}	Na^+	K^+			
1	3.5	1.8	-	5.80	0.6	bd1	0.2	0.30	bd1	0.05	-	-	-	-	-	2
2	3.2	1.4	-	5.30	0.7	-	0.2	0.18	-	0.04	-	-	-	0.072	-	2
7	5.0	1.6	-	5.20	1.0	-	0.2	0.24	-	0.04	-	-	-	0.300	-	2
26	5.2	1.3	-	5.80	0.9	-	0.1	0.25	-	0.06	-	-	-	0.034	0.95	2
TOTAL PRECIP	16.9	6.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NO. OBS.	4	4	-	4	4	-	4	4	-	4	-	-	-	-	-	-
A. MEAN	4.2	1.5	-	5.44	0.8	-	0.2	0.24	-	0.05	-	-	-	-	-	-
STD. DEV.	1.0	0.2	-	5.62	0.2	-	0.1	0.05	-	0.01	-	-	-	-	-	-
MINIMUM	3.2	1.3	-	5.20	0.6	-	0.1	0.18	-	0.04	-	-	-	-	-	-
MAXIMUM	5.2	1.8	-	5.80	1.0	-	0.2	0.30	-	0.06	-	-	-	-	-	-
P.W. MEAN	-	-	-	5.44	0.8	-	0.2	0.24	-	0.05	-	-	-	-	-	-

PRECIP TYPE

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IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

ELA-KENORA

DECEMBER 1979

DAY	AIR CONCENTRATIONS (10^{-6} gm^{-3})					GAS SO_2
	$\text{SO}_4^{=}$	NO_3^{-}	Cl^{-}	Na^{+}	NH_4^{+}	
1	0.35	0.25	bd1	bd1	bd1	0.7
2	0.77	2.65	bd1	bd1	0.89	1.5
3	1.69	0.76	bd1	bd1	0.84	-
4	0.60	0.99	bd1	bd1	bd1	1.7
5	1.49	0.31	bd1	bd1	bd1	1.0
6	1.38	0.63	bd1	bd1	bd1	0.8
7	0.75	0.17	0.62	0.39	bd1	0.6
8	0.73	0.55	0.38	0.30	bd1	0.4
9	-	-	-	-	-	-
10	1.02	0.38	bd1	bd1	bd1	0.6
11	-	-	-	-	-	-
12	-	-	-	-	-	-
13	-	-	-	-	-	-
14	-	-	-	-	-	-
15	-	-	-	-	-	-
16	-	-	-	-	-	-
17	-	-	-	-	-	-
18	-	-	-	-	-	-
19	-	-	-	-	-	-
20	-	-	-	-	-	-
21	-	-	-	-	-	-
22	-	-	-	-	-	-
23	-	-	-	-	-	-
24	-	-	-	-	-	-
25	-	-	-	-	-	-
26	2.53	2.45	bd1	bd1	1.36	4.9
27	0.61	0.64	bd1	bd1	bd1	2.1
28	0.59	1.52	bd1	bd1	bd1	4.4
29	1.07	2.75	bd1	bd1	0.92	4.9
30	1.54	3.03	bd1	0.28	1.38	2.6
31	1.45	2.39	bd1	bd1	0.68	1.1

bd1 - BELOW DETECTION LIMIT

NO. OBS.	-	-	-	-	-	-
A. MEAN	-	-	-	-	-	-
S.D.	-	-	-	-	-	-
MIN.	-	-	-	-	-	-
MAX.	-	-	-	-	-	-

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		pH		(10 ⁻³ g l ⁻¹)								ION BAL.	
	STD (mm)	COLL (mm)	FIELD	LAB	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO +VE/-VE

NO DATA

ELA-KENORA

JANUARY 1980

AIR CONCENTRATIONS (10^{-6} gm^{-3})
PARTICULATE

DAY	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	GAS SO ₂
1	bd1	bd1	bd1	bd1	bd1	1.7
2	-	-	-	-	-	-
3	bd1	bd1	bd1	bd1	bd1	-
4	1.51	1.09	bd1	bd1	bd1	-
5	-	-	-	-	-	-
6	bd1	bd1	bd1	bd1	bd1	-
7	bd1	bd1	bd1	bd1	bd1	bd1
8	1.46	0.75	bd1	0.21	bd1	3.1
9	0.96	0.79	bd1	bd1	bd1	1.2
10	2.05	1.56	bd1	bd1	bd1	6.9
11	0.68	bd1	0.27	0.19	bd1	2.3
12	1.16	0.99	0.34	0.35	bd1	3.3
13	0.81	0.67	bd1	bd1	bd1	1.7
14	0.74	0.31	bd1	bd1	bd1	1.2
15	2.00	1.66	bd1	0.34	bd1	2.3
16	1.29	0.67	bd1	bd1	bd1	bd1
17	1.11	bd1	bd1	0.38	bd1	bd1
18	1.33	0.40	bd1	bd1	bd1	1.0
19	0.32	0.72	bd1	bd1	bd1	1.3
20	0.51	1.63	bd1	bd1	bd1	1.8
21	0.95	1.06	bd1	bd1	bd1	3.5
22	0.38	bd1	bd1	bd1	bd1	0.8
23	0.89	0.38	0.32	0.25	bd1	0.7
24	0.86	1.56	bd1	0.22	bd1	0.7
25	0.76	bd1	0.25	0.30	bd1	1.6
26	0.98	0.43	bd1	0.30	bd1	2.8
27	1.04	bd1	0.26	0.39	bd1	1.3
28	0.72	0.28	0.24	0.16	bd1	bd1
29	1.27	0.58	0.25	0.27	bd1	2.1
30	1.34	0.65	0.41	0.31	bd1	1.6
31	0.88	1.00	bd1	bd1	bd1	1.4

bd1 - BELOW DETECTION LIMIT

NO. OBS.	29	29	-	-	-	26
A. MEAN	0.90	0.59	-	-	-	1.7
S.D.	0.54	0.55	-	-	-	1.5
MIN.	bd1	bd1	-	-	-	bd1
MAX.	2.05	1.66	-	-	-	6.9

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		pH		(10 ⁻³ g l ⁻¹)										TOT P	ION BAL. RATIO +VE/-VE	PRECIP TYPE
	STD (mm)	COLL (mm)	FIELD	LAB	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺					
6 (2)	5.5	2.9	-	5.30	0.6	1.062	0.4	0.20	0.228	0.04	0.25	0.29	0.022	1.17	2		
10	15.0	14.2	-	-	-	-	-	-	-	-	-	-	-	-	2		
12	1.6	1.3	-	6.50	2.9	-	0.3	2.80	-	0.37	-	-	-	-	2		
14	3.0	2.1	-	4.90	0.4	0.487	0.1	0.30	0.055	0.01	-	-	0.020	-	2		
23	1.0	0.3	-	-	5.3	-	3.2	-	-	-	-	-	-	-	2		
25	1.0	1.0	-	4.30	1.3	-	1.1	-	-	-	-	-	-	-	2		
26	1.3	1.0	-	-	1.4	-	0.6	-	-	-	-	-	-	-	2		
27	0.8	0.8	-	4.10	1.1	-	bd1	-	-	-	-	-	-	-	2		
TOTAL PRECIP	23.7	20.7															
NO. OBS.	7	7	-	-	6	-	6	-	-	-	-	-	-	-	-		
A. MEAN	3.4	3.0	-	-	2.1	-	0.9	-	-	-	-	-	-	-	-		
STD. DEV.	5.2	5.0	-	-	1.8	-	1.2	-	-	-	-	-	-	-	-		
MINIMUM	0.8	0.3	-	-	0.4	-	bd1	-	-	-	-	-	-	-	-		
MAXIMUM	15.0	14.2	-	-	5.3	-	3.2	-	-	-	-	-	-	-	-		
P.W. MEAN			-	-	1.7	-	0.7	-	-	-	-	-	-	-	-		

PRECIP TYPE
1 - RAIN
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T - TRACE AMOUNT

DAY() - DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
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ELA-KENORA

FEBRUARY 1980

AIR CONCENTRATIONS (10^{-6}gm^{-3})
PARTICULATE

DAY	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	GAS SO ₂
1	0.48	0.47	bd1	bd1	bd1	2.4
2	0.77	0.60	bd1	bd1	bd1	2.6
3	0.87	0.54	bd1	bd1	bd1	2.1
4	1.73	1.22	bd1	bd1	bd1	5.4
5	2.68	1.55	bd1	bd1	0.92	11.5
6	6.09	2.14	bd1	bd1	1.96	10.5
7	5.04	0.89	bd1	bd1	1.48	4.3
8	2.54	0.41	bd1	0.22	bd1	3.7
9	4.95	0.82	bd1	bd1	1.27	6.2
10	0.65	bd1	bd1	0.17	bd1	0.6
11	1.98	0.31	bd1	0.18	bd1	1.8
12	1.21	0.92	bd1	bd1	bd1	2.4
13	bd1	bd1	bd1	bd1	bd1	1.7
14	1.41	1.31	bd1	bd1	bd1	3.3
15	1.45	0.43	bd1	bd1	bd1	2.4
16	1.08	0.42	bd1	bd1	bd1	2.4
17	0.44	0.41	bd1	bd1	bd1	3.1
18	1.42	1.66	bd1	bd1	bd1	3.5
19	0.83	0.34	bd1	bd1	bd1	3.4
20	0.95	bd1	bd1	bd1	bd1	3.3
21	1.63	0.31	bd1	bd1	bd1	2.3
22	1.16	bd1	bd1	bd1	bd1	1.6
23	0.37	bd1	bd1	bd1	bd1	2.5
24	1.83	bd1	0.34	0.20	bd1	3.7
25	-	-	-	-	-	7.2
26	2.56	0.49	0.59	0.44	bd1	4.1
27	0.58	bd1	bd1	bd1	bd1	1.4
28	1.65	bd1	bd1	bd1	bd1	2.2
29	1.28	bd1	bd1	bd1	bd1	1.4

bd1 - BELOW DETECTION LIMIT

NO. OBS.	28	28	-	-	-	29
A. MEAN	1.70	0.54	-	-	-	3.6
S.D.	1.46	0.58	-	-	-	2.5
MIN.	bd1	bd1	-	-	-	0.6
MAX.	6.09	2.14	-	-	-	11.5

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

 $(10^{-3} \text{g l}^{-1})$

													(10 ⁻³ g/l ⁻¹)		ION BAL.	
DAY	AMOUNT		pH		SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO +VE/-VE	PRECIP TYPE	
	STD (mm)	COLL (mm)	FIELD	LAB												
4	3.7	2.0	-	4.30	0.9	0.930	bd1	0.20	0.023	0.06	0.95	0.25	-	-	2	
9	4.6	2.0	-	4.30	1.0	-	0.5	0.40	-	0.04	0.75	0.25	-	-	2	
10(2)	1.0	1.0	-	4.50	2.9	-	2.5	-	-	-	-	-	-	-	2	
19	0.7	1.0	-	4.10	4.0	-	1.6	-	-	-	-	-	-	-	2	
21	6.7	6.5	-	4.70	0.4	0.310	0.3	0.20	0.001	0.02	0.90	0.40	-	3.64	2	
22	0.6	1.0	-	4.20	1.8	-	1.7	-	-	-	-	-	-	-	2	
23	1.9	1.6	-	4.30	0.8	-	0.9	0.38	-	0.05	0.95	0.35	-	-	2	
TOTAL PRECIP	18.2	14.1														
NO. OBS.	6	6	-	6	6	-	6	-	-	-	-	-	-	-		
A. MEAN	3.0	2.4	-	4.28	1.5	-	0.8	-	-	-	-	-	-	-		
STD. DEV.	2.4	2.1	-	4.71	1.3	-	0.7	-	-	-	-	-	-	-		
MINIMUM	0.6	1.0	-	4.10	0.4	-	bd1	-	-	-	-	-	-	-		
MAXIMUM	6.7	6.5	-	4.70	4.0	-	1.7	-	-	-	-	-	-	-		
P.W. MEAN			-	4.39	0.9	-	0.4	-	-	-	-	-	-	-		

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
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- 4 - UNCERTAIN

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

ELA-KENORA

MARCH 1980

AIR CONCENTRATIONS (10^{-6} gm^{-3})						GAS
PARTICULATE						
DAY	$\text{SO}_4^{=}$	NO_3^{-}	Cl^{-}	Na^{+}	NH_4^{+}	SO_2
1	0.91	0.45	bd1	bd1	bd1	1.3
2	1.46	1.33	bd1	bd1	bd1	2.2
3	bd1	bd1	bd1	bd1	bd1	bd1
4	0.51	bd1	bd1	bd1	bd1	3.0
5	0.97	0.61	bd1	bd1	bd1	2.6
6	1.28	0.69	bd1	bd1	bd1	3.7
7	0.64	bd1	bd1	bd1	bd1	1.9
8	0.94	0.69	bd1	bd1	bd1	3.8
9	2.17	0.75	bd1	bd1	0.88	3.6
10	0.81	bd1	bd1	bd1	bd1	1.6
11	bd1	bd1	bd1	bd1	bd1	0.7
12	0.46	bd1	bd1	bd1	bd1	5.6
13	2.30	0.76	bd1	bd1	bd1	3.7
14	1.16	bd1	bd1	bd1	bd1	2.5
15	1.79	0.75	bd1	bd1	bd1	4.1
16	2.49	0.68	bd1	bd1	bd1	6.2
17	2.06	bd1	bd1	bd1	bd1	3.4
18	bd1	bd1	bd1	bd1	bd1	1.9
19	3.30	1.84	bd1	bd1	1.65	6.1
20	1.92	bd1	bd1	bd1	bd1	5.7
21	1.49	bd1	bd1	bd1	bd1	5.1
22	1.45	bd1	bd1	bd1	bd1	2.2
23	1.48	bd1	bd1	bd1	bd1	2.4
24	2.36	0.42	bd1	0.19	bd1	6.8
25	1.00	bd1	bd1	bd1	bd1	1.6
26	4.27	1.63	bd1	bd1	1.66	2.6
27	bd1	0.73	3.28	bd1	1.30	1.0
28	bd1	bd1	2.15	bd1	bd1	2.5
29	bd1	bd1	1.49	bd1	bd1	2.0
30	bd1	0.44	2.18	bd1	bd1	4.4
31	1.02	bd1	bd1	bd1	bd1	1.6

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	-	-	-	-	31
A. MEAN	1.23	-	-	-	-	3.1
S.D.	1.04	-	-	-	-	1.7
MIN.	bd1	-	-	-	-	bd1
MAX.	4.27	-	-	-	-	6.8

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		PH	LAB	(10 ⁻³ g l ⁻¹)								TOT P	ION BAL. RATIO +VE/-VE	PRECIP TYPE
	STD (mm)	COLL (mm)			$\text{SO}_4^{=}$	NO_3^{-}	Cl^{-}	Ca^{++}	NH_4^{+}	Mg^{++}	Na^{+}	K^{+}			
2	1.0	1.6	-	4.30	0.3	-	0.5	0.40	-	0.04	-	-	-	-	2
9	5.1	3.9	-	4.50	0.4	0.310	0.3	0.20	0.001	0.03	0.80	0.30	-	3.91	2
11	2.1	1.3	-	4.20	0.7	-	0.6	-	-	-	-	-	-	-	2
12	10.7	6.8	4.72	4.40	0.4	1.240	0.3	0.18	0.008	0.02	1.05	0.35	-	2.84	2
19	2.8	2.3	-	4.10	3.6	4.737	0.4	0.64	1.194	0.07	0.62	0.31	-	1.35	2
26	4.5	4.7	-	4.50	2.7	3.541	bd1	0.20	1.391	0.03	0.08	0.21	0.041	-	2
TOTAL PRECIP	26.2	20.6													
NO. OBS.	6	6	-	6	6	-	6	5	-	5	-	-	-	-	-
A. MEAN	4.4	3.4	-	4.31	1.4	-	0.4	0.32	-	0.04	-	-	-	-	-
STD. DEV.	3.5	2.1	-	4.72	1.4	-	0.2	0.20	-	0.02	-	-	-	-	-
MINIMUM	1.0	1.3	-	4.10	0.3	-	bd1	0.18	-	0.02	-	-	-	-	-
MAXIMUM	10.7	6.8	-	4.50	3.6	-	0.6	0.64	-	0.07	-	-	-	-	-
P.W. MEAN			-	4.36	1.2	-	0.3	0.25	-	0.03	-	-	-	-	-
PRECIP TYPE															
T - TRACE AMOUNT															
1 - RAIN															
2 - SNOW															
3 - MIXED															
4 - UNCERTAIN															

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

ELA-KENORA

APRIL 1980

AIR CONCENTRATIONS (10^{-6} gm^{-3})
PARTICULATE

DAY	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	GAS SO ₂
1	0.58	bd1	bd1	bd1	bd1	2.1
2	0.64	bd1	bd1	bd1	bd1	1.7
3	bd1	bd1	bd1	bd1	bd1	bd1
4	0.73	bd1	bd1	bd1	bd1	1.8
5	0.77	bd1	bd1	bd1	bd1	2.4
6	2.84	0.64	bd1	bd1	1.34	3.0
7	1.32	bd1	bd1	bd1	bd1	bd1
8	1.47	bd1	bd1	bd1	bd1	1.0
9	1.69	bd1	bd1	bd1	bd1	1.7
10	1.31	bd1	bd1	bd1	bd1	bd1
11	1.08	bd1	bd1	bd1	bd1	bd1
12	1.69	bd1	bd1	bd1	bd1	1.6
13	1.72	bd1	bd1	bd1	bd1	1.4
14	1.26	0.30	bd1	bd1	bd1	1.0
15	0.59	bd1	bd1	bd1	bd1	1.1
16	1.08	0.81	bd1	bd1	bd1	1.9
17	0.36	bd1	bd1	bd1	bd1	bd1
18	0.61	0.40	bd1	bd1	bd1	1.8
19	bd1	bd1	bd1	bd1	bd1	1.3
20	1.01	0.48	bd1	bd1	bd1	2.5
21	0.40	0.41	bd1	bd1	bd1	2.5
22	0.38	bd1	bd1	bd1	bd1	-
23	1.10	bd1	bd1	bd1	bd1	bd1
24	0.44	bd1	bd1	bd1	bd1	2.7
25	bd1	bd1	bd1	bd1	bd1	bd1
26	0.72	bd1	bd1	bd1	bd1	bd1
27	0.42	bd1	bd1	bd1	bd1	bd1
28	0.38	bd1	bd1	bd1	bd1	bd1
29	bd1	bd1	bd1	bd1	bd1	bd1
30	1.36	0.49	bd1	bd1	bd1	0.8

bd1 - BELOW DETECTION LIMIT

NO. OBS.	30	-	-	-	-	29
A. MEAN	0.86	-	-	-	-	1.1
S.D.	0.64	-	-	-	-	1.0
MIN.	bd1	-	-	-	-	bd1
MAX.	2.84	-	-	-	-	3.0

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10^{-3} g l^{-1})

DAY	AMOUNT STD (mm)	COLL (mm)	PH FIELD LAB	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	ION BAL. RATIO +VE/-VE	PRECIP TYPE
9	2.5	2.0	-	4.50	2.8	-	bd1	0.36	-	0.06	-	-	-	2
10	1.4	1.3	-	4.90	0.9	-	bd1	0.14	-	0.02	-	-	-	2
11	3.8	2.9	-	4.50	0.8	0.044	bd1	0.14	0.012	0.02	0.12	0.13	0.045	2
TOTAL PRECIP	7.7	6.2												
NO. OBS.	3	3	-	3	3	-	-	3	-	3	-	-	-	-
A. MEAN	2.6	2.1	-	4.60	1.5	-	-	0.21	-	0.03	-	-	-	-
STD. DEV.	1.2	0.8	-	4.96	1.1	-	-	0.13	-	0.02	-	-	-	-
MINIMUM	1.4	1.3	-	4.50	0.8	-	-	0.14	-	0.02	-	-	-	-
MAXIMUM	3.8	2.9	-	4.90	2.8	-	-	0.36	-	0.06	-	-	-	-
P.W. MEAN			-	4.55	1.5	-	-	0.21	-	0.03	-	-	-	-

PRECIP TYPE T - TRACE AMOUNT
 1 - RAIN
 2 - SNOW
 3 - MIXED
 4 - UNCERTAIN

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
 IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

ELA-KENORA

MAY 1980

DAY	AIR CONCENTRATIONS (10^{-6} gm^{-3})					GAS SO ₂
	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	
1	0.94	0.40	bd1	bd1	bd1	bd1
2	bd1	bd1	bd1	bd1	bd1	1.0
3	1.12	0.69	bd1	bd1	bd1	bd1
4	1.10	0.52	bd1	bd1	bd1	0.9
5	0.43	bd1	bd1	bd1	bd1	bd1
6	bd1	bd1	bd1	bd1	bd1	bd1
7	bd1	bd1	bd1	bd1	bd1	bd1
8	0.66	bd1	bd1	bd1	bd1	bd1
9	bd1	bd1	bd1	bd1	bd1	bd1
10	0.65	bd1	bd1	bd1	bd1	bd1
11	0.74	bd1	bd1	bd1	bd1	bd1
12	0.32	bd1	bd1	bd1	bd1	bd1
13	bd1	bd1	bd1	bd1	bd1	bd1
14	1.71	bd1	bd1	bd1	bd1	bd1
15	1.85	0.32	bd1	bd1	bd1	bd1
16	1.54	0.43	bd1	bd1	bd1	1.3
17	1.78	0.78	bd1	bd1	bd1	1.1
18	1.01	0.28	bd1	bd1	bd1	bd1
19	1.48	0.87	bd1	bd1	* 1.11	bd1
20	3.72	1.10	bd1	bd1	* 1.96	bd1
21	3.70	1.86	bd1	bd1	* 2.22	1.1
22	-	-	-	-	-	-
23	-	-	-	-	-	-
24	-	-	-	-	-	-
25	-	-	-	-	-	-
26	2.78	* 1.36	bd1	bd1	1.47	2.8
27	0.97	* 0.46	bd1	bd1	bd1	2.5
28	2.56	* 1.44	bd1	bd1	1.40	1.3
29	0.53	bd1	bd1	bd1	bd1	bd1
30	0.95	* 0.26	bd1	bd1	bd1	bd1
31	0.89	* 0.47	bd1	bd1	bd1	0.7

bd1 - BELOW DETECTION LIMIT

NO. OBS.	27	27	-	-	-	-
A. MEAN	1.16	0.42	-	-	-	-
S.D.	1.04	0.52	-	-	-	-
MIN.	bd1	bd1	-	-	-	-
MAX.	3.72	1.86	-	-	-	-

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10 ⁻³ g l ⁻¹)															ION BAL.	
DAY	AMOUNT		PH		SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO +VE/-VE	PRECIP TYPE	
	STD (mm)	COLL (mm)	FIELD	LAB												
6	0.8	1.0	-	-	3.3	-	0.8	2.40	-	0.43	-	-	-	-	2	
10	-	5.0	-	5.50	0.9	0.885	0.3	0.73	0.312	0.12	0.40	0.15	0.036	2.07	3	
11	0.2	2.6	-	4.60	1.0	0.753	0.4	0.65	0.231	0.10	-	-	0.022	-	1	
26 (5)	15.7	12.4	-	-	-	-	-	-	-	-	-	-	-	1.24	1	
TOTAL PRECIP 1.0 8.6																
NO. OBS.	-	3	-	-	3	-	3	3	-	3	-	-	-	-	-	
A. MEAN	-	2.9	-	-	1.7	-	0.5	1.26	-	0.22	-	-	-	-	-	
STD. DEV.	-	2.0	-	-	1.4	-	0.3	0.99	-	0.19	-	-	-	-	-	
MINIMUM	-	1.0	-	-	0.9	-	0.3	0.65	-	0.10	-	-	-	-	-	
MAXIMUM	-	5.0	-	-	3.3	-	0.8	2.40	-	0.43	-	-	-	-	-	
P.W. MEAN	-	-	-	-	2.8	-	0.7	2.05	-	0.36	-	-	-	-	-	

PRECIP TYPE

T - TRACE AMOUNT

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DAY () - DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
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ELA-KENORA

JUNE 1980

AIR CONCENTRATIONS (10^{-6} gm^{-3})						GAS SO ₂
DAY	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	
1	-	-	-	-	-	bd1
2	bd1	bd1	bd1	bd1	bd1	bd1
3	0.29	bd1	bd1	bd1	bd1	bd1
4	1.71	0.48	bd1	bd1	0.88	1.6
5	4.83	0.77	bd1	bd1	1.81	bd1
6	0.65	0.27	bd1	bd1	bd1	bd1
7	0.79	bd1	bd1	bd1	bd1	bd1
8	0.93	bd1	bd1	bd1	bd1	0.7
9	0.61	bd1	bd1	bd1	bd1	bd1
10	bd1	bd1	bd1	bd1	bd1	bd1
11	0.71	0.45	bd1	bd1	bd1	bd1
12	1.87	0.66	bd1	bd1	0.89	0.9
13	0.69	bd1	bd1	bd1	bd1	bd1
14	bd1	bd1	bd1	bd1	bd1	bd1
15	bd1	bd1	bd1	bd1	bd1	bd1
16	1.25	0.35	bd1	bd1	1.05	bd1
17	1.29	bd1	bd1	bd1	1.15	bd1
18	1.28	bd1	bd1	bd1	1.09	bd1
19	1.39	0.45	bd1	bd1	1.36	bd1
20	-	-	-	-	-	-
21	-	-	-	-	-	-
22	-	-	-	-	-	-
23	-	-	-	-	-	-
24	-	-	-	-	-	-
25	-	-	-	-	-	-
25	-	-	-	-	-	-
27	-	-	-	-	-	-
28	-	-	-	-	-	-
29	-	-	-	-	-	-
30	-	-	-	-	-	-

bd1 - BELOW DETECTION LIMIT

NO. OBS.	-	-	-	-	-	-
A. MEAN	-	-	-	-	-	-
S.D.	-	-	-	-	-	-
MIN.	-	-	-	-	-	-
MAX.	-	-	-	-	-	-

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		PH	FIELD	LAB	PRECIPITATION CONCENTRATIONS (10^{-3} g l^{-1})					Na ⁺	K ⁺	TOT P	ION BAL. RATIO +VE/-VE	PRECIP TYPE
	STD (mm)	COLL (mm)				SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺					
4	2.0	1.5	-	-	4.10	4.8	-	0.8	1.40	-	0.19	-	-	-	1
8	2.5	2.4	-	-	4.50	1.8	0.443	0.2	0.77	0.153	0.09	bd1	0.25	-	1
12	4.9	5.2	-	-	6.50	2.2	2.036	0.2	0.79	1.010	0.09	0.30	0.15	0.073	1
14	1.7	1.1	-	-	-	5.5	-	0.6	-	-	-	-	-	-	1
24(4)	15.2	14.0	-	-	-	-	-	-	-	-	-	-	-	1.38	1
28	13.2	9.4	-	-	6.60	bd1	0.261	0.1	0.57	0.200	0.08	0.05	0.06	0.024	1
29	1.4	0.9	-	-	-	-	-	-	-	-	-	-	-	-	1
TOTAL PRECIP	25.7	20.5													
NO. OBS.	6	6	-	-	-	5	-	5	-	-	-	-	-	-	-
A. MEAN	4.3	3.4	-	-	-	2.9	-	0.4	-	-	-	-	-	-	-
STD. DEV.	4.5	3.3	-	-	-	2.3	-	0.3	-	-	-	-	-	-	-
MINIMUM	1.4	0.9	-	-	-	bd1	-	0.1	-	-	-	-	-	-	-
MAXIMUM	13.2	9.4	-	-	-	5.5	-	0.8	-	-	-	-	-	-	-
P.W. MEAN			-	-	-	1.4	-	0.2	-	-	-	-	-	-	-

PRECIP TYPE

T - TRACE AMOUNT

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ERRATUM SHEET

In the report 'Results of the Canadian Air and Precipitation Monitoring Network APN: July 1979 to June 1980' AQRB-81-026-T by L.A. Barrie, H.A. Wiebe, P. Fellin and K. Anlauf, the actual air concentrations of SO_4^- , NO_3^- , Cl^- , Na^+ and NH_4^+ at Long Point are about twice the reported values for the period May 12 - June 30, 1980. Replace the data sheets for those two months with the attached correct sheets.

Dec. 1981

LONG POINT

JUNE 1980

AIR CONCENTRATIONS (10^{-6} gm^{-3})

DAY	PARTICULATE					GAS			PARTICULATE			
	SO ₄ ⁻	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	SO ₂	Br	V	Al	Mn	Ca	
1	6.80	3.32	0.39	bd1	3.25	8.4	0.0129	0.00361	0.520	0.0167	0.72	
2	9.19	6.21	0.53	2.25	4.96	7.8	-	-	-	-	-	
3	3.10	1.26	0.34	0.92	1.63	-	bd1	0.00047	0.234	0.0078	1.19	
4	3.97	4.06	0.51	0.48	2.50	16.0	0.0118	0.00390	0.332	0.0161	0.49	
5	11.17	4.13	bd1	bd1	4.77	8.4	0.0094	0.00664	0.251	0.0095	bd1	
6	8.60	3.69	bd1	bd1	3.85	7.1	0.0153	0.00236	0.201	0.0068	bd1	
7	bd1	bd1	bd1	bd1	bd1	-	bd1	bd1	bd1	bd1	bd1	
8	bd1	bd1	bd1	bd1	bd1	-	bd1	bd1	bd1	bd1	bd1	
9	2.65	3.97	0.66	0.44	1.97	2.0	bd1	0.00087	0.264	0.0068	0.76	
10	bd1	bd1	1.00	0.70	bd1	bd1	bd1	bd1	bd1	bd1	0.32	
11	7.76	9.00	0.54	bd1	4.24	22.6	0.0277	0.00729	0.713	0.0226	1.20	
12	18.50	4.85	0.83	0.69	4.68	-	0.0331	0.00865	1.600	0.0786	1.12	
13	18.45	7.93	0.41	bd1	6.66	15.1	0.0254	0.00483	0.652	0.0299	0.42	
14	12.01	4.71	0.34	bd1	4.98	8.2	0.0118	0.00201	0.184	0.0119	bd1	
15	0.86	0.69	0.20	bd1	0.65	1.7	bd1	0.00023	bd1	bd1	bd1	
16	4.04	4.13	0.46	bd1	2.15	7.1	bd1	0.00122	0.296	0.0113	1.63	
17	5.72	2.55	0.39	0.32	1.94	22.8	bd1	0.00188	0.293	0.0090	0.47	
18	11.30	13.34	0.49	0.35	5.88	18.7	0.0228	0.00438	0.494	0.0250	1.03	
19	7.50	6.16	0.45	bd1	3.41	8.6	0.0147	0.00396	0.444	0.0174	2.00	
20	1.04	0.99	bd1	bd1	0.71	3.7	bd1	0.00042	0.319	0.0071	0.25	
21	4.25	4.03	0.25	bd1	2.64	7.4	0.0098	0.00360	0.234	0.0054	0.55	
22	9.38	4.42	bd1	bd1	3.84	18.5	0.0175	0.00281	0.387	0.0154	0.27	
23	27.82	1.79	0.36	bd1	6.65	-	0.0224	0.00765	1.432	0.0217	0.76	
24	27.73	4.33	0.45	bd1	8.03	30.0	0.0251	0.00561	1.160	0.0353	0.71	
25	19.43	3.34	bd1	0.28	4.89	24.3	0.0117	0.00456	0.648	0.0169	0.57	
26	14.99	6.14	0.38	bd1	6.01	7.7	0.0145	0.00205	0.432	0.0168	0.50	
27	8.11	4.43	0.37	bd1	3.42	12.5	0.0220	0.00242	0.554	0.0152	2.06	
28	5.44	4.87	0.33	0.30	3.30	-	0.0215	0.00453	0.172	0.0097	0.28	
29	2.30	1.84	bd1	bd1	1.48	5.2	bd1	0.00051	0.099	bd1	bd1	
30	7.22	3.21	0.36	bd1	3.96	1.9	bd1	0.00143	0.273	0.0054	0.49	

bd1 - BELOW DETECTION LIMIT

NO. OBS.	30	30	30	-	30	24	29	29	29	29	29
A. MEAN	8.65	3.98	0.33	-	3.41	11.1	0.0114	0.00303	0.420	0.0144	0.61
S.D.	7.53	2.84	0.26	-	2.13	8.1	0.0105	0.00248	0.394	0.0153	0.58
MIN.	bd1	bd1	bd1	-	bd1	bd1	bd1	bd1	bd1	bd1	bd1
MAX.	27.82	13.34	1.00	-	8.03	30.0	0.0331	0.00865	1.600	0.0786	2.06

PRECIPITATION CONCENTRATIONS

 $(10^{-3} \text{ gl}^{-1})$

DAY	AMOUNT		PH										ION BAL.		PRECIP TYPE
	STD (mm)	COLL (mm)	FIELD	LAB	SO ₄ ⁻	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	+VE/-VE	
1	5.4	5.9	-	4.10	4.5	2.213	0.1	0.51	0.408	0.06	bd1	0.15	0.032	-	1
2	10.4	10.7	-	4.30	2.0	5.002	bd1	0.31	1.006	0.02	bd1	0.10	0.018	-	1
6	1.3	1.3	-	-	-	-	-	-	-	-	-	-	-	-	1
7	19.4	19.5	-	4.10	3.9	1.859	0.2	0.46	0.382	0.05	0.20	0.10	0.013	1.20	1
9	7.0	6.5	-	4.40	1.7	2.568	bd1	0.22	0.652	0.02	bd1	0.05	0.008	-	1
15	11.0	9.4	-	4.00	4.8	3.054	0.1	0.57	0.778	0.07	bd1	0.11	0.008	-	1
19	17.3	14.3	-	4.10	5.2	3.453	0.1	0.53	0.984	0.08	0.09	0.09	0.027	1.04	1
28	10.3	9.4	-	3.90	7.8	4.471	0.2	0.75	1.146	0.11	0.05	0.08	0.010	1.00	1
TOTAL PRECIP	82.1	77.0													
NO. OBS.	8	8	-	7	7	7	7	7	7	7	-	7	7	-	
A. MEAN	10.3	9.6	-	4.10	4.3	3.231	0.1	0.48	0.765	0.06	-	0.10	0.017	-	
STD. DEV.	6.0	5.5	-	4.54	2.1	1.163	0.1	0.17	0.300	0.03	-	0.03	0.010	-	
MINIMUM	1.3	1.3	-	3.90	1.7	1.859	bd1	0.22	0.382	0.02	-	0.05	0.008	-	
MAXIMUM	19.4	19.5	-	4.40	7.8	5.002	0.2	0.75	1.146	0.11	-	0.15	0.032	-	
P.W. MEAN			-	4.09	4.4	3.186	0.1	0.49	0.768	0.06	-	0.10	0.016		

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
- 2 - SNOW
- 3 - MIXED
- 4 - UNCERTAIN

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

LONG POINT

MAY 1980

AIR CONCENTRATIONS (10^{-6} gm^{-3})

DAY	PARTICULATE					GAS			PARTICULATE		
	SO ₄ ⁻	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	SO ₂	Br	V	Al	Mn	Ca
1	4.73	5.88	bd1	bd1	3.69	4.2	0.0152	0.00273	0.111	bd1	1.07
2	4.91	4.25	bd1	bd1	3.48	3.4	bd1	0.00278	0.210	0.0104	0.79
3	5.41	6.94	bd1	bd1	4.78	15.3	0.0224	0.00450	0.552	0.0138	1.48
4	6.66	2.61	bd1	bd1	3.29	13.8	bd1	0.00408	0.465	0.0077	0.75
5	3.87	5.00	bd1	bd1	3.29	5.6	0.0171	0.00394	1.171	0.0295	2.31
6	2.39	1.84	bd1	bd1	2.04	6.7	bd1	0.00285	0.355	bd1	0.55
7	1.06	bd1	bd1	bd1	1.21	bd1	bd1	0.00101	0.315	0.0090	0.65
8	1.31	1.64	bd1	bd1	1.65	3.7	bd1	0.00143	0.431	0.0066	1.30
9	3.15	3.16	bd1	bd1	2.76	4.9	bd1	0.00216	0.548	0.0114	0.77
10	6.60	5.12	bd1	bd1	3.66	24.9	0.0204	0.00412	0.966	0.0373	1.26
11	6.71	6.57	bd1	bd1	5.18	7.7	0.0221	0.00315	0.690	0.0152	0.68
12	3.61	8.48	0.50	bd1	4.07	13.8	0.0192	0.00683	0.537	0.0205	1.00
13	5.92	5.04	0.48	bd1	4.01	7.6	bd1	0.00223	0.126	0.0087	bd1
14	3.22	bd1	bd1	bd1	1.96	bd1	bd1	0.00045	0.087	bd1	0.46
15	4.38	5.48	0.34	bd1	3.34	5.4	bd1	0.00246	0.215	0.0139	1.37
16	4.44	3.83	bd1	bd1	2.48	11.1	bd1	0.00260	0.363	0.0124	0.88
17	6.86	2.73	bd1	bd1	3.41	3.4	0.0189	0.00546	0.263	bd1	bd1
18	5.56	2.24	bd1	bd1	3.02	3.7	bd1	0.00114	bd1	bd1	bd1
19	7.54	5.51	0.42	bd1	3.87	bd1	0.0320	0.00219	0.143	bd1	1.13
20	8.44	5.90	0.49	bd1	4.04	22.4	0.0288	0.00509	0.453	0.0220	1.37
21	10.25	12.49	0.47	bd1	5.89	18.4	0.0352	0.01048	0.684	0.0317	1.56
22	8.73	7.95	bd1	bd1	4.95	13.8	0.0466	0.00479	0.816	0.0263	1.17
23	3.14	3.23	bd1	bd1	2.25	12.2	0.0222	0.00186	1.391	0.0124	1.09
24	11.64	10.05	0.46	bd1	5.95	13.1	0.0397	0.00963	6.685	0.0811	5.06
25	1.57	2.14	bd1	bd1	1.52	5.6	bd1	0.00136	0.656	0.0123	1.47
26	2.68	4.68	0.54	bd1	1.61	-	-	-	-	-	-
27	1.97	1.81	bd1	bd1	bd1	13.9	bd1	0.00241	0.852	0.0312	3.51
28	5.76	3.85	0.67	bd1	3.34	13.3	bd1	0.00559	1.408	0.0220	3.18
29	9.84	7.64	bd1	bd1	4.82	40.0	0.0303	0.00593	1.273	0.0508	4.03
30	2.14	1.25	bd1	bd1	1.02	16.6	0.0165	0.00421	0.960	0.0274	1.45
31	10.15	3.02	bd1	bd1	3.68	3.1	bd1	0.00043	0.088	bd1	bd1

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	31	-	-	31	30	30	30	30	30	30
A. MEAN	5.31	4.53	-	-	3.23	10.3	0.0129	0.00360	0.760	0.0171	1.34
S.D.	2.88	2.87	-	-	1.43	8.6	0.0146	0.00242	1.188	0.0176	1.19
MIN.	1.06	bd1	-	-	bd1	bd1	bd1	0.00043	bd1	bd1	bd1
MAX.	11.64	12.49	-	-	5.95	40.0	0.0466	0.01048	6.685	0.0811	5.06

PRECIPITATION CONCENTRATIONS

 $(10^{-3} \text{ gl}^{-1})$

DAY	AMOUNT		pH												ION BAL. RATIO		PRECIP TYPE
	STD (mm)	COLL (mm)	FIELD	LAB	SO ₄ ⁻	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	+VE/-VE			
6	1.4	1.6	-	7.30	9.1	-	1.0	9.40	-	1.60	-	-	0.143	-	-	-	1
10	4.4	4.2	-	4.30	5.3	4.471	0.3	2.20	0.586	0.29	bd1	0.14	0.043	-	-	-	1
11	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
12	9.3	9.8	-	4.40	2.4	2.302	0.1	0.66	0.313	0.08	0.30	0.06	0.051	1.22	-	-	1
13	4.0	3.9	-	4.10	3.9	3.940	0.3	0.37	0.952	0.05	bd1	0.15	-	-	-	-	1
17	29.0	28.3	-	4.10	3.2	3.010	bd1	0.21	0.788	0.02	bd1	0.05	0.009	-	-	-	1
30	8.2	6.2	-	4.10	7.7	3.719	0.2	1.50	1.017	0.27	bd1	0.15	0.090	-	-	-	1
TOTAL PRECIP																	
NO. OBS.																	
A. MEAN																	
STD. DEV.																	
MINIMUM																	
MAXIMUM																	
P.W. MEAN																	

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
- 2 - SNOW
- 3 - MIXED
- 4 - UNCERTAIN

DAY () - DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

APPENDIX 2

MONTHLY SUMMARIES OF
MEASURED CONCENTRATIONS
IN AIR AND PRECIPITATION
AT CHALK RIVER

CHALK RIVER

JULY 1979

DAY	AIR CONCENTRATIONS (10^{-6}gm^{-3})					GAS SO ₂
	PARTICULATE					
	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	
1	2.38	bd1	bd1	bd1	1.03	4.0
2	-	-	-	-	-	-
3	bd1	bd1	bd1	bd1	bd1	3.2
4	bd1	bd1	bd1	bd1	bd1	1.8
5	bd1	bd1	bd1	bd1	bd1	bd1
6	-	-	-	-	-	-
7	1.18	bd1	bd1	bd1	bd1	6.3
8	bd1	bd1	bd1	bd1	bd1	bd1
9	-	-	-	-	-	-
10	11.46	1.47	bd1	6.42	3.11	7.2
11	-	-	-	-	-	2.8
12	6.96	bd1	bd1	6.45	2.22	9.6
13	-	-	-	-	-	-
14	7.67	1.39	bd1	bd1	2.97	3.9
15	13.94	0.99	bd1	bd1	3.37	1.9
16	-	-	-	-	-	-
17	bd1	bd1	bd1	bd1	bd1	bd1
18	-	-	-	-	-	-
19	1.27	bd1	bd1	bd1	1.07	1.8
20	-	-	-	-	-	-
21	7.62	1.60	bd1	bd1	2.74	4.0
22	6.92	1.34	bd1	bd1	2.29	4.3
23	-	-	-	-	-	-
24	18.05	0.94	bd1	bd1	3.15	3.7
25	-	-	-	-	-	-
26	-	-	-	-	-	-
27	-	-	-	-	-	-
28	2.72	0.65	bd1	bd1	0.77	1.7
29	4.14	bd1	bd1	bd1	0.85	2.4
30	-	-	-	-	-	-
31	6.35	0.65	bd1	bd1	1.56	3.7

bd1 - BELOW DETECTION LIMIT

NO. OBS.	-	-	-	-	-	-
A. MEAN	-	-	-	-	-	-
S.D.	-	-	-	-	-	-
MIN.	-	-	-	-	-	-
MAX.	-	-	-	-	-	-

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		FIELD	pH LAB	(10 ⁻³ g l ⁻¹)								TOT P	ION BAL.	
	STD (mm)	COLL (mm)			SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺		RATIO +VE/-VE	PRECIP TYPE
1	17.6	17.6	4.40	4.50	1.7	1.948	0.2	0.10	0.182	0.01	0.20	0.15	0.022	0.81	1
2	11.0	10.4	5.30	5.20	0.6	1.018	0.2	0.05	0.067	0.01	0.12	0.11	0.024	0.59	1
14	0.8	0.2	-	-	16.5	-	2.2	-	-	-	-	-	-	-	1
15	25.6	25.7	3.20	4.00	8.5	2.740	0.2	0.10	0.601	0.03	0.12	0.09	0.009	0.65	1
25	25.0	37.9	-	4.50	2.2	0.899	0.2	0.05	0.254	0.03	0.08	0.05	0.008	0.86	1
28	2.0	1.6	-	7.40	12.8	-	1.4	2.00	-	0.93	-	-	-	-	1
31	1.8	1.6	-	4.20	9.4	-	0.5	0.69	-	0.18	-	-	0.370	-	1
NO. OBS.	7	7	-	6	7	-	7	6	-	6	-	-	-	-	-
A. MEAN	12.0	13.6	-	4.41	7.4	-	0.7	0.50	-	0.20	-	-	-	-	-
STD. DEV.	10.9	14.3	-	4.43	6.1	-	0.6	0.78	-	0.36	-	-	-	-	-
MINIMUM	0.8	0.2	-	4.00	0.6	-	0.2	0.05	-	0.01	-	-	-	-	-
MAXIMUM	25.6	37.9	-	7.40	16.5	-	2.2	2.00	-	0.93	-	-	-	-	-
P.W. MEAN	-	-	-	4.31	4.4	-	0.3	0.14	-	0.05	-	-	-	-	-

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
- 2 - SNOW
- 3 - MIXED
- 4 - UNCERTAIN

CHALK RIVER

AUGUST 1979

AIR CONCENTRATIONS (10^{-6}gm^{-3})

DAY	PARTICULATE					GAS
	$\text{SO}_4^{=}$	NO_3^{-}	Cl^{-}	Na^{+}	NH_4^{+}	
1	1.07	bd1	bd1	bd1	bd1	3.6
2	3.68	bd1	bd1	bd1	1.06	3.2
3	-	-	-	-	-	-
4	7.34	0.61	bd1	bd1	2.16	3.2
5	1.46	bd1	bd1	bd1	bd1	2.2
6	-	-	-	-	-	-
7	1.60	bd1	bd1	bd1	0.72	1.5
8	bd1	bd1	bd1	bd1	bd1	bd1
9	bd1	bd1	bd1	bd1	bd1	bd1
10	-	-	-	-	-	-
11	0.78	bd1	bd1	bd1	bd1	4.0
12	1.17	bd1	bd1	bd1	bd1	8.2
13	-	-	-	-	-	-
14	0.80	bd1	bd1	bd1	bd1	6.4
15	bd1	bd1	bd1	bd1	bd1	3.9
16	1.67	bd1	bd1	bd1	0.65	4.5
17	-	-	-	-	-	-
18	13.49	1.09	bd1	bd1	3.01	5.2
19	3.64	bd1	bd1	bd1	1.08	1.5
20	-	-	-	-	-	-
21	0.71	bd1	bd1	bd1	bd1	1.8
22	1.15	0.86	bd1	bd1	0.65	5.4
23	9.28	1.48	bd1	bd1	2.86	4.4
24	-	-	-	-	-	-
25	1.52	bd1	bd1	bd1	0.74	5.0
26	3.64	bd1	bd1	bd1	0.94	3.4
27	-	-	-	-	-	-
28	16.65	1.62	bd1	bd1	4.07	5.5
29	8.17	bd1	bd1	bd1	2.06	3.8
30	1.99	bd1	bd1	bd1	1.13	5.1
31	-	-	-	-	-	-

bd1 - BELOW DETECTION LIMIT

NO. OBS.	-	-	-	-	-	-
A. MEAN	-	-	-	-	-	-
S.D.	-	-	-	-	-	-
MIN.	-	-	-	-	-	-
MAX.	-	-	-	-	-	-

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		pH		(10 ⁻³ gl ⁻¹)								TOT P	ION BAL. RATIO		PRECIP TYPE
	STD (mm)	COLL (mm)	FIELD	LAB	$\text{SO}_4^{=}$	NO_3^{-}	Cl^{-}	Ca^{++}	NH_4^{+}	Mg^{++}	Na^{+}	K^{+}		+VE/-VE		
1	12.4	12.4	3.70	4.40	1.9	0.930	0.1	0.11	0.076	0.01	0.02	0.03	0.012	0.91		1
2	1.9	1.3	-	-	10.1	-	0.8	0.88	-	0.17	-	-	-	-		1
4	1.6	1.6	-	3.80	8.5	-	0.6	0.60	-	0.12	-	-	-	-		1
7	3.4	2.6	-	3.50	19.5	4.604	0.5	1.20	1.180	0.19	-	-	-	-		1
9	11.4	11.4	4.45	4.80	1.8	0.708	0.2	0.27	0.171	0.06	-	-	0.024	-		1
13	8.0	7.8	4.40	4.50	4.4	2.390	0.3	1.00	0.556	0.18	-	-	0.069	-		1
17	2.8	2.9	-	3.70	11.9	8.942	1.0	2.10	0.791	0.45	-	-	0.088	-		1
18	2.1	2.3	-	4.60	5.9	1.505	0.8	1.10	0.630	0.25	-	-	-	-		1
23	5.4	5.2	-	4.00	6.1	3.763	0.4	0.45	0.460	0.08	0.27	0.28	0.061	0.87		1
24	0.4	0.1	-	-	21.0	-	3.4	-	-	-	-	-	-	-		1
28	1.0	-	-	3.70	17.0	-	1.3	-	-	-	-	-	-	-		1
NO. OBS.	11	10	-	9	11	-	11	9	-	9	-	-	-	-		
A. MEAN	4.6	4.8	-	3.92	9.8	-	0.9	0.86	-	0.17	-	-	-	-		
STD. DEV.	4.2	4.3	-	3.98	6.8	-	0.9	0.60	-	0.13	-	-	-	-		
MINIMUM	0.4	0.1	-	3.50	1.8	-	0.1	0.11	-	0.01	-	-	-	-		
MAXIMUM	12.4	12.4	-	4.80	21.0	-	3.4	2.10	-	0.45	-	-	-	-		
P.W. MEAN	-	-	-	4.13	5.6	-	0.4	0.61	-	0.11	-	-	-	-		

PRECIP. TYPE

T - TRACE AMOUNT

1 - RAIN

2 - SNOW

3 - MIXED

4 - UNCERTAIN

CHALK RIVER

SEPTEMBER 1979

AIR CONCENTRATIONS (10^{-6} gm^{-3})
PARTICULATE

DAY	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	GAS SO ₂
1	8.72	2.08	bd1	bd1	3.18	6.8
2	13.78	0.90	bd1	bd1	3.12	6.2
3	1.21	bd1	bd1	bd1	0.76	-
4	bd1	bd1	bd1	bd1	bd1	2.3
5	2.71	bd1	bd1	bd1	1.58	1.2
6	7.55	0.87	bd1	bd1	2.15	6.0
7	bd1	bd1	bd1	0.30	bd1	bd1
8	bd1	bd1	bd1	bd1	bd1	5.3
9	2.36	bd1	bd1	bd1	1.12	5.4
10	2.89	bd1	bd1	bd1	bd1	3.0
11	2.26	bd1	bd1	bd1	bd1	2.9
12	1.55	bd1	bd1	bd1	bd1	2.4
13	21.21	1.75	bd1	bd1	4.59	5.8
14	1.88	bd1	bd1	bd1	0.64	1.3
15	1.78	bd1	bd1	bd1	bd1	3.3
16	2.70	bd1	bd1	bd1	0.86	7.1
17	7.16	2.73	bd1	bd1	3.07	8.4
18	5.01	0.97	bd1	bd1	2.02	5.5
19	0.69	bd1	bd1	bd1	bd1	2.8
20	3.51	1.63	bd1	bd1	1.71	7.1
21	2.32	bd1	bd1	bd1	1.06	0.8
22	1.10	bd1	bd1	bd1	bd1	3.8
23	0.51	bd1	bd1	bd1	bd1	3.6
24	1.41	0.79	bd1	bd1	0.88	2.5
25	5.07	1.49	bd1	bd1	2.07	5.0
26	0.57	bd1	bd1	bd1	bd1	1.6
27	2.77	1.45	bd1	bd1	1.77	14.5
28	17.50	3.59	bd1	bd1	4.12	17.9
29	21.09	2.56	bd1	bd1	4.68	9.5
30	19.10	1.74	bd1	bd1	4.04	3.4

bd1 - BELOW DETECTION LIMIT

NO. OBS.	30	-	-	-	30	29
A. MEAN	5.28	-	-	-	1.45	5.0
S.D.	6.51	-	-	-	1.54	3.9
MIN.	bd1	-	-	-	bd1	bd1
MAX.	21.21	-	-	-	4.68	17.9

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10 ⁻³ g l ⁻¹)															ION BAL.	
DAY	AMOUNT		pH		SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO +VE/-VE	PRECIP TYPE	
	STD (mm)	COLL (mm)	FIELD	LAB												
1	6.2	6.7	3.92	4.10	5.8	2.877	0.4	0.60	0.344	0.10	0.20	0.15	-	0.84	1	
2	11.0	11.4	3.87	4.20	6.1	1.594	0.3	0.30	0.685	0.04	0.15	0.14	0.026	0.80	1	
6	1.0	0.7	-	3.90	10.9	-	1.2	-	-	-	-	-	-	-	1	
9	6.4	6.2	-	4.00	8.7	6.419	0.4	1.00	1.301	0.14	0.15	0.10	0.102	0.82	1	
10	9.4	8.8	4.41	4.40	5.1	2.169	0.5	0.60	0.666	0.12	0.32	0.17	0.028	0.87	1	
13	10.8	10.4	3.85	4.00	7.9	4.161	0.5	0.50	0.770	0.12	0.25	0.22	0.033	0.79	1	
14	4.8	4.4	4.58	4.70	4.4	1.018	0.6	0.71	0.564	0.18	0.50	0.20	0.065	1.02	1	
18	6.4	5.9	-	4.80	5.6	1.638	0.6	0.71	1.151	0.16	0.45	0.19	0.096	0.96	1	
20	8.8	8.1	-	4.40	6.9	4.560	0.7	1.49	1.234	0.26	0.52	0.19	0.124	0.97	1	
21	3.5	2.9	-	4.90	5.0	1.771	0.7	0.97	0.706	0.24	0.68	0.20	-	1.01	1	
30	1.2	1.0	-	4.00	20.1	-	1.4	8.00	-	0.70	-	-	-	-	1	
TOTAL PRECIP	69.5	66.5														
NO. OBS.	11	11	-	11	11	9	11	10	9	10	9	9	-	9		
A. MEAN	6.3	6.0	-	4.20	7.9	2.912	0.7	1.49	0.825	0.21	0.36	0.17	-	0.90		
STD. DEV.	3.5	3.6	-	4.40	4.5	1.781	0.3	2.31	0.328	0.19	0.19	0.04	-	0.09		
MINIMUM	1.0	0.7	-	3.90	4.4	1.018	0.3	0.30	0.344	0.04	0.15	0.10	-	0.79		
MAXIMUM	11.0	11.4	-	4.90	20.1	6.419	1.4	8.00	1.301	0.70	0.68	0.22	-	1.02		
P.W. MEAN			-	4.23	6.7	3.023	0.5	0.85	0.832	0.15	0.32	0.17	-			

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
- 2 - SNOW
- 3 - MIXED
- 4 - UNCERTAIN

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

CHALK RIVER

OCTOBER 1979

AIR CONCENTRATIONS (10^{-6}gm^{-3})
PARTICULATE

DAY	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	GAS SO ₂
1	7.81	1.91	bd1	bd1	bd1	bd1
2	4.15	1.15	bd1	bd1	bd1	4.6
3	6.06	2.46	bd1	bd1	0.92	1.6
4	1.93	1.15	bd1	bd1	bd1	1.6
5	-	-	-	-	-	-
6	4.91	1.95	bd1	bd1	bd1	6.0
7	1.11	bd1	bd1	bd1	bd1	2.7
8	-	-	-	-	-	bd1
9	0.45	bd1	bd1	0.35	0.67	1.4
10	39.09	* 0.92	bd1	bd1	bd1	6.9
11	13.72	* 2.05	bd1	bd1	0.86	4.4
12	27.72	* 1.80	bd1	bd1	0.85	16.0
13	3.11	* 0.74	bd1	bd1	bd1	2.1
14	-	-	-	-	-	-
15	0.93	* 1.10	bd1	bd1	bd1	4.6
16	3.11	* 1.06	bd1	bd1	bd1	7.8
17	-	-	-	-	-	-
18	-	-	-	-	-	-
19	9.06	* 4.21	bd1	bd1	1.71	4.5
20	13.66	* 5.23	bd1	bd1	2.09	7.5
21	7.39	* 4.70	0.71	bd1	2.49	8.9
22	8.93	3.35	bd1	0.50	2.76	16.0
23	3.81	1.27	bd1	bd1	1.36	3.6
24	bd1	bd1	bd1	bd1	bd1	bd1
25	0.40	bd1	bd1	bd1	bd1	bd1
26	-	-	-	-	-	-
27	-	-	-	-	-	-
28	-	-	-	-	-	-
29	1.76	bd1	bd1	bd1	bd1	bd1
30	1.94	bd1	bd1	bd1	bd1	2.3
31	15.87	4.67	bd1	0.67	5.32	12.5

bd1 - BELOW DETECTION LIMIT

NO. OBS.	-	-	-	-	-	24
A. MEAN	-	-	-	-	-	4.6
S.D.	-	-	-	-	-	4.7
MIN.	-	-	-	-	-	bd1
MAX.	-	-	-	-	-	16.0

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10^{-3}g l^{-1})

DAY	AMOUNT STD (mm)	COLL (mm)	PH FIELD	LAB	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	ION BAL. RATIO +VE/-VE	PRECIP TYPE
3	4.2	3.9	-	3.90	9.7	6.065	0.9	1.30	0.968	0.25	0.61	0.15	0.169	0.91	1
4	6.8	6.8	5.90	4.10	6.5	5.002	0.5	0.82	0.747	0.15	0.38	0.16	-	0.84	1
5	39.4	40.4	6.80	4.60	1.8	0.620	0.2	0.15	0.082	0.03	0.09	0.04	0.008	0.86	1
6	3.1	2.9	-	4.00	7.4	9.296	0.7	1.70	0.828	0.29	0.59	0.23	0.142	0.88	1
7	4.8	4.2	-	4.70	2.9	1.771	0.5	0.64	0.191	0.16	0.46	0.11	0.066	0.96	1
9	3.6	3.3	-	6.40	3.3	0.974	1.0	0.88	0.139	0.23	1.98	0.35	0.395	1.32	3
12	24.0	24.1	4.80	4.60	1.3	1.417	0.2	0.14	0.124	0.03	0.06	0.04	0.011	0.83	1
19	6.0	7.7	4.20	4.10	5.8	4.294	0.6	0.70	0.576	0.09	0.40	0.28	0.068	0.86	1
20	34.4	32.2	4.50	4.60	2.8	1.195	0.3	0.23	0.341	0.03	0.30	0.11	0.057	0.86	1
21	0.3	0.8	-	4.40	18.0	-	2.1	2.50	-	0.30	-	-	-	-	1
23	10.5	10.7	4.20	4.30	3.5	2.346	0.3	0.22	0.322	0.03	0.19	0.07	0.030	0.77	1
27	2.1	3.3	-	4.70	1.6	1.726	0.3	0.33	0.252	0.50	0.16	0.18	0.060	1.49	2
28	5.6	5.5	-	4.10	4.2	3.187	0.3	0.20	0.460	0.03	0.18	0.15	0.069	0.87	2
TOTAL PRECIP	144.8	145.8													
NO. OBS.	13	13	-	13	13	12	13	13	12	13	12	12	11	12	
A. MEAN	11.1	11.2	-	4.29	5.3	3.158	0.6	0.75	0.419	0.16	0.45	0.16	0.098	0.95	
STD. DEV.	12.9	12.7	-	4.42	4.6	2.586	0.5	0.71	0.298	0.15	0.52	0.09	0.110	0.22	
MINIMUM	0.3	0.8	-	3.90	1.3	0.620	0.2	0.14	0.082	0.03	0.06	0.04	0.008	0.77	
MAXIMUM	39.4	40.4	-	6.40	18.0	9.296	2.1	2.50	0.968	0.50	1.98	0.35	0.395	1.49	
P.W. MEAN			-	4.43	3.0	1.880	0.3	0.34	0.284	0.07	0.26	0.10	0.048		

PRECIP TYPE
 1 - RAIN
 2 - SNOW
 3 - MIXED
 4 - UNCERTAIN

T - TRACE AMOUNT

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
 IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

CHALK RIVER
NOVEMBER 1979

AIR CONCENTRATIONS (10^{-6} gm^{-3})						
PARTICULATE						
DAY	$\text{SO}_4^{=}$	NO_3^{-}	Cl^{-}	Na^{+}	NH_4^{+}	GAS SO_2
1	bd1	bd1	bd1	bd1	bd1	bd1
2	2.83	0.91	bd1	bd1	1.26	1.8
3	bd1	bd1	bd1	bd1	bd1	1.9
4	1.14	bd1	bd1	bd1	bd1	13.7
5	2.81	1.70	bd1	bd1	1.23	13.6
6	3.87	3.29	bd1	bd1	2.00	6.0
7	2.30	bd1	bd1	bd1	bd1	11.3
8	1.97	0.49	bd1	bd1	0.75	6.4
9	0.93	bd1	bd1	bd1	bd1	1.6
10	1.40	bd1	bd1	bd1	bd1	4.9
11	1.32	bd1	bd1	bd1	bd1	11.1
12	1.38	0.56	bd1	bd1	bd1	2.2
13	3.53	1.13	bd1	bd1	1.09	3.3
14	0.89	bd1	bd1	bd1	bd1	bd1
15	1.34	0.66	bd1	bd1	bd1	13.5
16	0.57	bd1	bd1	bd1	bd1	6.8
17	2.39	1.24	bd1	bd1	1.09	6.6
18	bd1	bd1	bd1	bd1	bd1	5.6
19	3.59	3.29	0.38	0.44	1.53	11.9
20	4.58	3.07	bd1	bd1	2.22	7.4
21	1.60	0.71	bd1	bd1	0.74	3.2
22	2.02	0.92	bd1	bd1	0.78	3.3
23	4.78	2.88	bd1	bd1	2.28	8.2
24	2.05	0.58	bd1	bd1	0.84	2.5
25	4.01	2.31	bd1	bd1	1.64	7.6
26	1.86	0.76	bd1	bd1	0.78	3.1
27	3.24	1.34	bd1	bd1	1.52	2.2
28	1.76	bd1	bd1	bd1	0.69	5.1
29	0.60	bd1	bd1	bd1	bd1	1.4
30	1.06	bd1	bd1	bd1	bd1	4.9

bd1 - BELOW DETECTION LIMIT

NO. OBS.	30	30	-	-	30	30
A. MEAN	1.99	0.86	-	-	0.68	5.7
S.D.	1.34	1.08	-	-	0.75	4.1
MIN.	bd1	bd1	-	-	bd1	bd1
MAX.	4.78	3.29	-	-	2.28	13.7

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		PH		(10 ⁻³ g _l ⁻¹)									ION BAL.		PRECIP TYPE
	STD (mm)	COLL (mm)	FIELD	LAB	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO +VE/-VE		
1	1.6	2.0	-	4.00	6.1	6.817	0.3	1.20	0.446	0.22	-	-	0.139	-	1	
3	0.4	1.0	-	4.00	6.3	-	1.5	1.60	-	0.25	-	-	-	-	1	
8	0.8	1.3	-	-	8.6	-	0.8	0.84	-	0.17	-	-	-	-	3	
9	8.6	9.1	4.50	4.50	1.2	2.258	0.2	0.10	0.191	0.02	0.11	0.09	0.052	0.84	2	
15	2.8	2.4	-	4.10	2.9	4.250	0.9	0.40	0.264	0.05	-	-	0.048	-	2	
19	3.5	3.9	-	4.10	5.0	4.427	1.8	0.70	0.527	0.08	1.35	0.32	0.105	0.96	1	
21	2.9	2.9	-	3.80	6.6	7.526	1.0	0.70	0.980	0.08	0.50	0.33	0.013	1.00	1	
22	8.2	8.5	4.30	4.20	2.6	2.258	0.4	0.15	0.343	0.03	0.30	0.19	0.027	1.09	1	
23	3.6	4.2	-	4.10	3.8	4.471	0.7	0.40	0.774	0.07	0.49	0.21	0.018	1.02	1	
25	7.2	7.5	4.00	4.10	3.6	3.099	0.9	0.20	0.479	0.06	0.65	0.16	0.021	1.02	1	
26	4.5	5.5	-	4.70	1.6	1.372	0.4	0.20	0.411	0.03	0.30	0.19	0.030	1.08	1	
27	9.0	9.8	3.40	4.20	2.1	3.409	0.2	0.10	0.635	bd1	0.15	0.16	0.038	-	2	
28	4.6	4.2	-	4.70	0.7	1.062	0.3	0.15	0.164	bd1	0.25	0.09	0.047	-	2	
29	1.3	1.3	-	5.60	2.2	-	0.6	0.20	-	0.04	-	-	-	-	2	
30	T	0.3	-	-	2.2	-	1.1	-	-	-	-	-	-	-	2	
TOTAL PRECIP	59.0	63.9														
NO. OBS.	15	15	-	13	15	-	15	14	-	14	-	-	-	-		
A. MEAN	3.9	4.3	-	4.17	3.7	-	0.7	0.50	-	0.08	-	-	-	-		
STD. DEV.	3.0	3.1	-	4.38	2.3	-	0.5	0.46	-	0.08	-	-	-	-		
MINIMUM	T	0.3	-	3.80	0.7	-	0.2	0.10	-	bd1	-	-	-	-		
MAXIMUM	9.0	9.8	-	5.60	8.6	-	1.8	1.60	-	0.25	-	-	-	-		
P.W. MEAN			-	4.21	2.8	-	0.6	0.28	-	0.04	-	-	-	-		

PRECIP TYPE
1 - RAIN
2 - SNOW
3 - MIXED
4 - UNCERTAIN

T - TRACE AMOUNT

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

CHALK RIVER

DECEMBER 1979

AIR CONCENTRATIONS (10^{-6} gm^{-3})
PARTICULATE

DAY	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	GAS SO ₂
1	1.20	bd1	bd1	bd1	bd1	9.2
2	0.89	bd1	bd1	bd1	bd1	16.7
3 *	1.62	6.35	bd1	0.74	0.89	12.9
4 *	1.03	bd1	bd1	0.49	bd1	5.4
5 *	3.53	4.76	bd1	0.84	2.22	15.6
6 *	0.89	bd1	bd1	bd1	bd1	1.7
7 *	0.81	0.89	bd1	bd1	0.66	4.8
8	bd1	bd1	bd1	bd1	bd1	6.7
9 *	1.73	0.94	bd1	bd1	0.66	60.9
10	2.30	2.27	bd1	0.31	0.65	36.9
11	4.48	5.43	bd1	0.30	2.34	18.4
12	0.78	bd1	bd1	bd1	bd1	5.6
13	0.46	bd1	bd1	bd1	bd1	1.8
14	1.12	0.61	bd1	bd1	bd1	12.9
15	3.09	2.88	bd1	bd1	1.46	35.5
16	1.29	0.52	bd1	bd1	bd1	17.1
17	1.43	bd1	bd1	bd1	0.51	23.8
18	1.59	bd1	bd1	bd1	0.53	36.9
19	1.57	0.87	bd1	bd1	0.66	12.3
20	4.69	3.31	bd1	0.49	1.66	34.4
21	5.82	4.77	bd1	0.43	2.34	31.3
22	2.78	3.02	bd1	bd1	1.21	15.8
23	2.68	1.02	bd1	bd1	0.96	15.2
24	2.31	bd1	bd1	bd1	bd1	27.8
25	2.75	bd1	bd1	bd1	bd1	3.6
26	0.80	bd1	bd1	bd1	bd1	5.2
27	1.45	bd1	bd1	bd1	bd1	5.8
28	0.99	bd1	bd1	bd1	bd1	3.0
29	bd1	bd1	bd1	bd1	bd1	8.0
30	1.29	bd1	bd1	bd1	bd1	7.4
31	1.70	bd1	bd1	bd1	bd1	11.7

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	-	-	-	-	31
A. MEAN	1.84	-	-	-	-	16.3
S.D.	1.36	-	-	-	-	13.7
MIN.	bd1	-	-	-	-	1.7
MAX.	5.82	-	-	-	-	60.9

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10^{-3} gi^{-1})

DAY	AMOUNT STD (mm)	COLL (mm)	PH FIELD LAB	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	ION BAL. RATIO +VE/-VE	PRECIP TYPE
4	4.5	2.9	-	4.80	1.3	2.700	0.3	0.40	0.833	0.05	-	-	0.066	- 2
5	1.4	1.3	-	-	4.9	-	1.2	0.80	-	0.13	-	-	-	- 2
6	2.1	0.7	-	-	3.2	-	4.7	-	-	-	-	-	-	- 2
7	0.6	0.4	-	4.90	1.6	2.879	0.8	0.28	0.694	0.06	0.60	0.55	0.076	- 2
9	1.0	0.7	-	4.70	1.7	-	0.8	-	-	-	-	-	-	- 2
10	1.8	0.7	-	-	1.9	-	1.1	1.10	-	0.13	-	-	-	- 2
16	3.8	1.0	-	7.20	8.5	-	3.4	-	-	-	-	-	-	- 2
22	6.8	6.8	3.90	4.30	4.0	4.073	0.4	0.40	1.168	0.05	0.32	0.19	-	0.99 1
23	6.0	6.2	-	4.20	3.5	2.169	0.6	0.40	0.392	0.05	0.47	0.36	0.074	1.11 1
24	4.2	4.6	-	5.50	1.7	2.390	0.5	0.40	0.949	0.04	0.55	0.25	0.058	1.22 1
TOTAL PRECIP	32.2	25.3												
NO. OBS.	10	10	-	-	10	-	10	-	-	-	-	-	-	-
A. MEAN	3.2	2.5	-	-	3.2	-	1.4	-	-	-	-	-	-	-
STD. DEV.	2.2	2.5	-	-	2.2	-	1.5	-	-	-	-	-	-	-
MINIMUM	0.6	0.4	-	-	1.3	-	0.3	-	-	-	-	-	-	-
MAXIMUM	6.8	6.8	-	-	8.5	-	4.7	-	-	-	-	-	-	-
P.W. MEAN			-	-	3.5	-	1.2	-	-	-	-	-	-	-

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
2 - SNOW
3 - MIXED
4 - UNCERTAIN

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

CHALK RIVER
JANUARY 1980

AIR CONCENTRATIONS (10^{-6}gm^{-3})						GAS SO ₂
PARTICULATE						
DAY	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	
1	3.34	0.48	0.22	bd1	0.40	8.8
2	1.89	bd1	bd1	0.32	bd1	-
3	1.52	0.30	1.08	0.58	bd1	6.5
4	0.85	0.44	0.25	bd1	bd1	4.2
5	1.03	bd1	bd1	bd1	bd1	11.6
6	2.74	1.14	bd1	0.71	0.61	10.6
7	2.37	1.11	bd1	bd1	0.80	9.9
8	1.49	0.29	bd1	bd1	bd1	15.8
9	1.36	0.44	0.29	bd1	0.26	8.3
10	0.87	2.22	0.23	bd1	1.10	18.2
11	1.65	1.26	bd1	bd1	0.78	9.5
12	0.33	bd1	bd1	bd1	bd1	26.7
13	0.77	0.79	bd1	bd1	0.44	10.5
14	4.17	1.94	bd1	bd1	1.16	16.8
15	1.25	0.29	bd1	bd1	0.43	8.0
16	1.73	1.32	0.51	0.46	0.84	13.6
17	3.19	5.13	0.47	0.45	2.01	12.5
18	2.72	2.00	bd1	bd1	1.41	6.0
19	1.58	bd1	bd1	bd1	0.31	12.1
20	0.78	bd1	0.17	bd1	bd1	29.1
21	1.34	0.46	bd1	bd1	bd1	12.0
22	2.64	2.74	bd1	bd1	1.23	16.2
23	1.07	0.35	0.55	0.36	bd1	10.4
24	1.50	0.65	0.33	0.30	bd1	18.8
25	1.85	0.95	0.22	bd1	bd1	34.8
26	0.41	0.30	bd1	bd1	bd1	14.9
27	1.02	0.25	bd1	bd1	bd1	15.3
28	1.03	bd1	bd1	bd1	bd1	18.6
29	bd1	bd1	bd1	bd1	bd1	3.7
30	1.42	bd1	bd1	bd1	bd1	3.2
31	0.79	bd1	bd1	bd1	bd1	3.7

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	31	-	-	-	30
A. MEAN	1.57	0.80	-	-	-	13.0
S.D.	0.95	1.09	-	-	-	7.4
MIN.	bd1	bd1	-	-	-	3.2
MAX.	4.17	5.13	-	-	-	34.8

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		PH	LAB	(10 ⁻³ g l ⁻¹)										TOT P	ION BAL. RATIO +VE/-VE	PRECIP TYPE
	STD (mm)	COLL (mm)			FIELD	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺				
6	4.9	2.3	-	4.50	1.2	2.877	0.3	0.50	0.151	0.06	-	-	0.100	-	2		
7	1.7	1.2	-	4.90	2.9	-	1.5	0.60	-	0.11	-	-	-	-	2		
10	5.2	4.6	-	4.40	2.3	3.054	0.6	0.45	0.348	0.06	0.62	0.33	0.047	1.07	1		
11	7.0	7.5	3.50	4.40	2.6	2.302	0.4	0.35	0.465	0.06	0.31	0.23	0.056	1.06	1		
17	6.6	5.2	3.40	4.50	3.3	3.763	1.2	0.56	0.496	0.10	1.45	0.70	0.073	1.08	1		
22	7.9	5.2	-	4.50	0.9	3.010	bd1	0.56	0.210	0.10	0.35	0.25	0.056	-	2		
27	1.0	1.0	-	4.50	2.1	-	0.9	-	-	-	-	-	-	-	2		
TOTAL PRECIP	34.3	27.0															
NO. OBS.	7	7	-	7	7	-	7	6	-	6	-	-	-	-			
A. MEAN	4.9	3.9	-	4.51	2.2	-	0.7	0.50	-	0.08	-	-	-	-			
STD. DEV.	2.6	2.4	-	5.04	0.9	-	0.5	0.09	-	0.02	-	-	-	-			
MINIMUM	1.0	1.0	-	4.40	0.9	-	bd1	0.35	-	0.06	-	-	-	-			
MAXIMUM	7.9	7.5	-	4.90	3.3	-	1.5	0.60	-	0.11	-	-	-	-			
P.W. MEAN			-	4.47	2.1	-	0.5	0.49	-	0.08	-	-	-	-			

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
- 2 - SNOW
- 3 - MIXED
- 4 - UNCERTAIN

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

CHALK RIVER

FEBRUARY 1980

AIR CONCENTRATIONS (10^{-6} gm^{-3})
PARTICULATE

DAY	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	GAS SO ₂
1	0.76	bd1	bd1	bd1	bd1	35.0
2	1.64	0.27	bd1	bd1	bd1	42.3
3	1.30	bd1	0.24	bd1	bd1	-
4	1.63	bd1	bd1	bd1	bd1	-
5	0.62	bd1	bd1	bd1	bd1	8.2
6	0.53	0.23	bd1	bd1	bd1	2.3
7	bd1	bd1	bd1	bd1	bd1	2.4
8	1.03	bd1	bd1	bd1	bd1	9.4
9	0.31	bd1	bd1	bd1	bd1	3.5
10	0.30	bd1	bd1	bd1	bd1	9.8
11	-	-	-	-	-	34.2
12	3.70	1.81	bd1	bd1	0.99	37.2
13	1.18	0.27	bd1	bd1	bd1	24.5
14	6.39	4.50	bd1	bd1	2.15	36.8
15	1.34	0.30	bd1	bd1	0.36	43.0
16	1.44	0.44	bd1	bd1	bd1	37.9
17	2.27	0.41	bd1	bd1	bd1	24.6
18	* 0.86	* 0.21	bd1	bd1	bd1	19.9
19	* 7.35	* 4.61	0.34	bd1	2.29	54.0
20	* 5.95	* 6.15	0.33	bd1	2.48	25.7
21	* 1.47	* 1.03	0.20	bd1	bd1	4.4
22	* 1.40	* 0.82	bd1	bd1	bd1	11.2
23	* 3.31	* 0.96	bd1	bd1	0.55	44.1
24	* 2.70	* 0.76	bd1	bd1	0.50	29.5
25	1.65	0.42	0.20	bd1	bd1	6.8
26	1.93	0.61	0.23	bd1	0.29	18.3
27	2.46	1.50	bd1	bd1	0.63	42.9
28	1.64	bd1	bd1	bd1	bd1	32.2
29	1.32	bd1	0.20	bd1	bd1	7.7

bd1 - BELOW DETECTION LIMIT

NO. OBS.	28	28	-	-	-	27
A. MEAN	2.02	0.96	-	-	-	24.0
S.D.	1.83	1.57	-	-	-	15.7
MIN.	bd1	bd1	-	-	-	2.3
MAX.	7.35	6.15	-	-	-	54.0

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10^{-3} gl^{-1})

(10 ⁻³ g l ⁻¹)													ION BAL.		
DAY	AMOUNT		pH		SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TCT P	RATIO +VE/-VE	PRECIP TYPE
	STD (mm)	COLL (mm)	FIELD	LAB											
11	1.2	1.6	-	4.20	1.4	6.862	1.0	4.20	0.207	0.34	0.90	0.30	-	2.16	2
14	0.6	0.7	-	4.10	4.8	-	1.1	-	-	-	-	-	-	-	2
15	0.8	0.7	-	4.40	1.4	-	1.3	-	-	-	-	-	-	-	2
16	0.2	0.7	-	3.50	2.5	-	0.7	-	-	-	-	-	-	-	2
19	3.2	3.3	-	4.00	2.1	5.711	0.6	0.08	0.254	0.04	1.00	0.10	-	1.10	2
20	1.2	1.3	-	3.70	4.7	-	2.1	6.32	-	1.08	4.10	0.55	-	-	2
22	3.0	2.9	-	4.30	1.2	2.568	0.5	0.04	0.133	0.03	1.50	0.45	-	1.70	2
23	4.8	3.9	-	4.60	0.8	0.974	0.4	0.20	0.058	0.03	1.25	0.30	-	2.31	2
24	3.3	3.3	-	4.30	2.0	-	0.6	0.20	-	0.04	0.80	0.25	-	-	2
26	2.1	1.3	-	4.20	0.9	-	0.7	-	-	-	-	-	-	-	2
27	1.3	1.6	-	4.20	1.2	-	2.1	0.44	-	0.05	-	-	-	-	2
TOTAL PRECIP	21.7	21.3													
NO. OBS.	11	11	-	11	11	-	11	-	-	-	-	-	-	-	
A. MEAN	2.0	1.9	-	4.02	2.1	-	1.0	-	-	-	-	-	-	-	
STD. DEV.	1.4	1.2	-	4.06	1.4	-	0.6	-	-	-	-	-	-	-	
MINIMUM	0.2	0.7	-	3.50	0.8	-	0.4	-	-	-	-	-	-	-	
MAXIMUM	4.8	3.9	-	4.60	4.8	-	2.1	-	-	-	-	-	-	-	
P.W. MEAN			-	4.18	1.7	-	0.8	-	-	-	-	-	-	-	

PRECIP TYPE
1 - RAIN
2 - SNOW
3 - MIXED
4 - UNCERTAIN

T - TRACE AMOUNT

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

CHALK RIVER

MARCH 1980

AIR CONCENTRATIONS (10^{-6}gm^{-3})

DAY	PARTICULATE					GAS
	$\text{SO}_4^{=}$	NO_3^-	Cl^-	Na^+	NH_4^+	SO_2
1	1.38	bd1	0.19	bd1	bd1	7.4
2	1.97	bd1	bd1	bd1	bd1	36.4
3	2.58	2.40	bd1	bd1	1.05	26.1
4	2.91	2.01	bd1	bd1	1.05	35.1
5	5.69	4.03	bd1	bd1	1.91	46.6
6	0.51	0.55	bd1	bd1	bd1	15.3
7	3.55	1.92	bd1	bd1	1.11	13.4
8	3.08	1.12	bd1	bd1	0.77	7.0
9	4.16	1.83	bd1	bd1	1.44	18.0
10	3.33	1.72	bd1	bd1	1.20	14.2
11	1.49	0.25	bd1	bd1	bd1	8.6
12	1.07	0.33	bd1	bd1	bd1	6.7
13	1.06	0.72	bd1	bd1	0.42	12.9
14	2.58	0.88	bd1	bd1	0.57	10.5
15	1.93	0.27	bd1	bd1	0.37	4.2
16	2.38	1.60	0.23	bd1	0.83	14.7
17	1.09	1.14	bd1	bd1	0.38	16.6
18	2.85	0.39	bd1	0.33	0.38	13.2
19	4.36	3.66	0.29	bd1	1.98	20.4
20	6.49	7.06	0.26	bd1	2.97	43.4
21	3.83	1.04	bd1	bd1	1.32	5.2
22	1.46	0.22	bd1	bd1	bd1	15.8
23	1.84	0.21	bd1	bd1	bd1	3.6
24	2.99	0.73	bd1	bd1	0.84	5.5
25	1.63	bd1	bd1	bd1	bd1	4.2
26	4.08	bd1	bd1	bd1	bd1	14.8
27	1.77	bd1	bd1	bd1	0.34	5.1
28	8.89	1.87	bd1	bd1	1.44	17.6
29	2.77	bd1	bd1	bd1	0.57	1.8
30	1.52	bd1	bd1	bd1	0.32	2.6
31	bd1	bd1	bd1	bd1	0.26	4.1

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	31	-	-	31	31
A. MEAN	2.75	1.16	-	-	0.69	14.5
S.D.	1.84	1.53	-	-	0.72	11.8
MIN.	bd1	bd1	-	-	bd1	1.8
MAX.	8.89	7.06	-	-	2.97	46.6

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		PH		(10 ⁻³ g l ⁻¹)										TOT P	ION BAL. RATIO +VE/-VE	PRECIP TYPE
	STD (mm)	COLL (mm)			$\text{SO}_4^{=}$	NO_3^-	Cl^-	Ca^{++}	NH_4^+	Mg^{++}	Na^+	K^+					
4	2.0	2.0	-	4.20	2.0	-	0.6	1.28	-	0.15	0.85	0.30	-	-	-	-	2
5	1.5	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
6	1.2	1.6	-	4.50	1.3	-	1.1	1.16	-	0.12	-	-	-	-	-	-	2
9	1.0	1.3	-	4.70	0.7	6.950	7.4	-	0.560	-	-	-	-	-	-	-	2
10	0.6	1.3	-	4.20	7.3	10.987	8.2	-	2.756	-	-	-	-	-	-	-	2
13	6.6	4.9	-	4.80	0.3	2.036	2.1	0.82	0.082	0.05	1.43	0.56	0.057	1.44	-	-	2
14	1.2	1.0	-	4.30	14.7	-	2.0	-	-	-	-	-	-	-	-	-	2
16	2.2	2.6	-	4.50	3.3	3.984	1.7	1.10	0.600	0.12	1.00	0.42	0.081	1.01	-	-	1
17	4.1	4.4	-	4.10	1.3	5.135	1.4	0.60	0.434	0.08	0.27	1.08	0.042	1.19	-	-	1
20	5.8	6.2	-	4.00	2.2	11.156	0.9	1.90	0.514	0.27	0.62	0.33	0.084	1.12	-	-	1
21	33.6	32.9	4.20	4.60	0.9	1.151	0.4	0.38	0.202	0.03	0.13	0.17	0.014	1.36	-	-	1
22	1.8	2.0	-	4.90	13.6	1.107	1.8	7.00	0.178	0.22	-	-	-	-	-	-	1
24	6.0	6.4	-	4.20	2.8	4.692	0.6	0.90	0.278	0.09	0.44	0.23	0.017	1.03	-	-	1
25	4.4	6.5	-	4.90	2.6	0.664	bd1	0.96	0.061	0.04	0.37	0.12	0.028	-	-	-	1
TOTAL PRECIP	72.0	74.7															
NO. OBS.	14	14	-	13	13	-	13	-	-	-	-	-	-	-	-	-	-
A. MEAN	5.1	5.3	-	4.36	4.1	-	2.2	-	-	-	-	-	-	-	-	-	-
STD. DEV.	8.4	8.2	-	4.55	4.8	-	2.6	-	-	-	-	-	-	-	-	-	-
MINIMUM	0.6	1.0	-	4.00	0.3	-	bd1	-	-	-	-	-	-	-	-	-	-
MAXIMUM	33.6	32.9	-	4.90	14.7	-	8.2	-	-	-	-	-	-	-	-	-	-
P.W. MEAN			-	4.42	2.0	-	0.9	-	-	-	-	-	-	-	-	-	-

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
- 2 - SNOW
- 3 - MIXED
- 4 - UNCERTAIN

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

CHALK RIVER

APRIL 1980

AIR CONCENTRATIONS (10^{-6} gm^{-3})

DAY	PARTICULATE					GAS SO ₂
	SO ₄ ⁻	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	
1	2.13	0.31	bd1	bd1	0.59	15.1
2	3.25	0.23	bd1	bd1	0.42	18.0
3	1.46	bd1	bd1	bd1	0.39	10.6
4	1.04	bd1	bd1	bd1	bd1	3.2
5	1.76	bd1	bd1	bd1	0.31	6.7
6	1.26	0.39	bd1	bd1	0.47	3.9
7	4.65	2.20	0.19	bd1	1.91	19.4
8	6.78	2.35	0.22	bd1	2.39	8.9
9	2.00	0.83	bd1	bd1	0.72	8.9
10	1.72	0.89	bd1	bd1	0.67	7.0
11	3.95	0.70	bd1	bd1	0.98	5.3
12	4.47	1.64	bd1	bd1	1.29	12.1
13	1.05	0.22	bd1	bd1	bd1	3.6
14	0.92	0.45	bd1	bd1	bd1	-
15	1.45	0.39	bd1	bd1	0.29	4.8
16	1.80	bd1	bd1	bd1	bd1	19.3
17	2.06	0.81	bd1	bd1	0.75	8.6
18	1.67	bd1	bd1	bd1	0.36	10.1
19	3.18	1.35	bd1	bd1	1.31	12.7
20	0.70	bd1	bd1	bd1	0.27	3.2
21	0.63	bd1	bd1	bd1	bd1	9.0
22	0.53	bd1	bd1	bd1	bd1	4.6
23	2.38	0.88	bd1	bd1	0.94	11.4
24	2.42	0.34	bd1	bd1	0.66	8.1
25	2.56	1.35	bd1	bd1	1.12	8.8
26	3.84	0.35	bd1	bd1	0.84	2.6
27	2.34	0.24	bd1	bd1	0.44	2.6
28	1.85	0.41	bd1	*	0.38	0.71
29	1.51	0.55	bd1	*	0.35	0.69
30	1.72	bd1	bd1	bd1	0.57	-

bd1 - BELOW DETECTION LIMIT

NO. OBS.	30	30	-	-	30	26
A. MEAN	2.24	0.56	-	-	0.63	8.7
S.D.	1.39	0.64	-	-	0.56	5.1
MIN.	0.53	bd1	-	-	bd1	2.6
MAX.	6.78	2.35	-	-	2.39	19.4

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10^{-3} g l^{-1})

DAY	AMOUNT		pH		SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	ION BAL. RATIO +VE/-VE	PRECIP TYPE
	STD (mm)	COLL (mm)	FIELD	LAB											
3	0.8	2.0	-	4.40	2.3	-	1.6	0.54	-	0.08	0.24	0.23	-	-	3
4	10.0	6.4	-	4.40	2.0	2.479	bd1	0.26	0.339	0.04	-	-	0.041	-	3
8	15.2	15.6	3.40	5.60	1.6	2.081	bd1	0.30	0.255	0.06	0.31	0.18	0.017	-	1
9	5.5	5.7	-	4.10	3.5	4.294	0.5	0.50	0.428	0.07	0.31	0.23	0.013	0.98	1
10	1.2	0.7	-	4.10	4.8	-	0.7	0.80	-	0.11	-	-	-	-	1
11	1.0	0.3	-	4.20	4.2	-	0.7	-	-	-	-	-	-	-	1
12	8.0	7.0	5.70	4.20	3.2	3.054	bd1	0.20	0.473	0.04	0.12	0.24	0.016	-	1
14	19.0	18.2	5.50	4.50	2.8	1.107	bd1	0.74	0.061	0.04	bd1	0.13	0.004	-	1
15	1.5	1.6	-	4.10	12.0	-	3.2	4.00	-	0.16	-	-	-	-	3
24	10.4	9.8	4.00	4.20	2.8	2.877	0.2	0.54	0.531	0.06	0.40	0.20	0.036	1.34	1
25	8.0	7.5	3.60	4.10	3.9	5.578	0.3	0.55	1.096	0.08	1.10	0.80	0.031	1.34	1
28	1.2	0.7	-	4.00	4.1	-	0.7	0.73	-	0.09	-	-	-	-	1
29	3.6	3.3	-	4.70	2.2	1.461	1.6	0.44	0.564	0.08	bd1	0.12	0.012	-	1
30	0.6	0.5	-	-	5.4	-	2.1	0.59	-	0.10	-	-	-	-	1
TOTAL PRECIP															
NO. OBS.															
A. MEAN															
STD. DEV.															
MINIMUM															
MAXIMUM															
P.W. MEAN															

PRECIP TYPE
 1 - RAIN
 2 - SNOW
 3 - MIXED
 4 - UNCERTAIN

T - TRACE AMOUNT

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
 IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

CHALK RIVER

MAY 1980

AIR CONCENTRATIONS (10^{-6} gm^{-3})
PARTICULATE

DAY	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	GAS SO ₂
1	1.67	0.37	bd1	bd1	0.61	16.7
2	2.29	0.76	bd1	bd1	0.66	8.5
3	0.38	bd1	bd1	bd1	bd1	1.1
4	1.31	0.22	bd1	bd1	0.38	16.0
5	0.61	0.36	bd1	bd1	0.55	4.8
6	3.38	0.38	bd1	bd1	0.94	14.7
7	1.44	0.51	bd1	bd1	0.75	4.8
8	1.03	bd1	bd1	bd1	0.42	3.1
9	1.31	bd1	bd1	bd1	0.32	8.6
10	2.81	0.99	bd1	bd1	0.69	9.1
11	3.56	bd1	bd1	bd1	1.40	5.2
12	1.86	0.35	bd1	bd1	0.65	5.0
13	0.36	bd1	bd1	bd1	bd1	6.3
14	2.03	bd1	bd1	bd1	bd1	16.6
15	1.22	bd1	bd1	bd1	bd1	6.8
16	bd1	bd1	bd1	bd1	bd1	3.6
17	1.89	0.86	bd1	bd1	0.87	4.3
18	1.03	bd1	bd1	0.74	0.39	bd1
19	0.77	bd1	bd1	bd1	0.47	1.2
20	0.77	0.51	bd1	bd1	0.50	2.1
21	bd1	bd1	bd1	bd1	bd1	2.5
22	0.64	bd1	bd1	bd1	0.56	12.0
23	4.99	2.16	bd1	bd1	2.21	-
24	2.70	1.98	bd1	bd1	1.51	6.3
25	0.45	bd1	bd1	bd1	0.32	bd1
26	0.49	bd1	bd1	bd1	0.40	0.8
27	0.50	bd1	bd1	bd1	0.39	2.5
28	0.67	bd1	bd1	bd1	0.47	bd1
29	1.60	0.76	bd1	bd1	0.59	4.6
30	2.41	0.73	bd1	bd1	1.09	3.4
31	0.98	0.30	bd1	bd1	0.65	0.8

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	-	-	-	31	30
A. MEAN	1.44	-	-	-	0.59	5.6
S.D.	1.15	-	-	-	0.49	5.4
MIN.	bd1	-	-	-	bd1	bd1
MAX.	4.99	-	-	-	2.21	18.7

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10^{-3} gl^{-1})

(10 ⁻³ g l ⁻¹)														ION BAL. RATIO	
DAY	AMOUNT		PH		SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	+VE/-VE	PRECIP TYPE
	STD (mm)	COLL (mm)	FIELD	LAB											
5	1.0	0.5	-	4.10	12.9	-	0.9	3.20	-	0.49	-	-	-	-	1
6	5.6	5.5	-	5.90	1.9	3.364	0.2	1.40	0.637	0.22	0.30	0.18	0.036	1.36	1
7	9.1	7.5	3.40	4.70	1.6	1.992	0.2	0.59	0.404	0.08	bd1	0.05	0.058	-	1
8	6.0	5.2	-	4.30	6.5	0.575	0.1	2.40	0.084	0.11	0.40	0.18	0.009	1.40	1
9	1.4	0.5	-	6.60	9.3	-	1.1	2.40	-	0.78	-	-	-	-	1
11	3.8	3.6	-	4.00	6.9	3.696	0.5	0.86	1.123	0.12	bd1	0.18	0.040	-	1
13	1.4	2.3	-	4.60	3.3	2.213	0.6	1.10	0.591	0.27	-	-	-	-	1
17	9.8	9.6	4.50	5.00	1.4	0.708	0.1	0.36	0.466	0.05	0.20	0.06	0.035	1.53	1
18	12.2	11.7	4.50	4.40	1.4	0.664	0.1	0.31	0.057	0.02	-	-	0.018	-	1
30	5.1	4.9	-	4.00	7.3	4.646	0.2	1.30	1.162	0.20	0.40	0.25	0.102	1.16	1
31	7.5	7.5	4.65	4.60	2.7	1.682	0.1	0.56	0.792	0.05	bd1	0.16	0.077	-	1
TOTAL PRECIP 62.9 59.0															
NO. OBS.	11	11	-	11	11	9	11	11	9	11	-	-	-	-	
A. MEAN	5.7	5.4	-	4.39	5.0	2.194	0.4	1.32	0.591	0.22	-	-	-	-	
STD. DEV.	3.7	3.6	-	4.43	3.8	1.490	0.4	0.96	0.394	0.23	-	-	-	-	
MINIMUM	1.0	0.5	-	4.00	1.4	0.575	0.1	0.31	0.057	0.02	-	-	-	-	
MAXIMUM	12.2	11.7	-	6.60	12.9	4.648	1.1	3.20	1.162	0.78	-	-	-	-	
P.W. MEAN			-	4.44	3.3	1.813	0.2	0.91	0.495	0.11	-	-	-	-	

PRECIP TYPE

- 1 - RAIN
- 2 - SNOW
- 3 - MIXED
- 4 - UNCERTAIN

T - TRACE AMOUNT

DAY() - DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

CHALK RIVER

JUNE 1980

AIR CONCENTRATIONS (10^{-6} gm^{-3})
PARTICULATE

DAY	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	GAS SO ₂
1	1.21	bd1	bd1	-	-	6.2
2	-	-	-	-	-	3.5
3	-	-	-	-	-	11.3
4	0.62	bd1	bd1	bd1	bd1	bd1
5	1.30	bd1	bd1	bd1	0.39	13.5
6	1.84	0.58	bd1	bd1	0.61	1.3
7	4.94	0.81	bd1	bd1	1.52	1.5
8	0.69	bd1	bd1	bd1	bd1	bd1
9	1.22	bd1	bd1	bd1	bd1	3.5
10	1.30	bd1	bd1	bd1	bd1	7.6
11	0.84	bd1	bd1	bd1	bd1	3.9
12	0.87	0.59	bd1	bd1	0.52	5.0
13	7.48	3.10	bd1	bd1	2.84	20.1
14	12.36	2.17	bd1	bd1	2.95	21.9
15	bd1	bd1	bd1	bd1	bd1	bd1
16	0.74	bd1	bd1	bd1	0.35	2.0
17	1.40	0.45	bd1	bd1	0.75	3.1
18	0.84	bd1	bd1	bd1	0.39	bd1
19	0.56	bd1	bd1	bd1	0.33	1.9
20	0.77	bd1	bd1	bd1	0.35	bd1
21	0.94	bd1	bd1	bd1	0.44	0.8
22	4.64	0.74	bd1	bd1	1.78	4.2
23	12.11	1.64	bd1	bd1	3.24	11.5
24	14.35	1.33	bd1	bd1	3.74	14.6
25	14.15	1.32	bd1	bd1	3.31	11.9
26	6.43	0.84	bd1	bd1	2.03	3.5
27	bd1	bd1	bd1	bd1	bd1	bd1
28	0.48	0.32	bd1	bd1	bd1	8.0
29	1.80	0.60	bd1	bd1	0.69	bd1
30	2.60	0.56	bd1	bd1	1.17	1.4

bd1 - BELOW DETECTION LIMIT

NO. OBS.	28	28	-	-	27	30
A. MEAN	3.45	0.54	-	-	1.02	5.4
S.D.	4.49	0.77	-	-	1.21	6.1
MIN.	bd1	bd1	-	-	bd1	bd1
MAX.	14.35	3.10	-	-	3.74	21.9

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10^{-3} g l^{-1})

DAY	AMOUNT STD COLL (mm) (mm)	PH FIELD LAB	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	ION BAL. RATIO +VE/-VE	PRECIP TYPE
6	1.2 1.6	- -	20.2	5.401	8.5	2.00	1.507	0.31	-	-	-	-	1
7	17.4 17.1	3.72 4.20	2.9	2.435	bd1	0.26	0.680	0.02	bd1	0.10	0.038	-	1
9	7.0 5.5	- 4.20	3.1	0.641	0.1	0.54	0.233	0.05	bd1	0.10	0.019	-	1
10	1.2 1.6	- -	5.1	0.664	0.1	0.36	0.139	0.03	-	-	-	-	1
15	5.4 5.9	- 4.20	2.4	1.461	bd1	0.22	0.242	0.02	bd1	0.10	0.026	-	1
17	1.0 1.3	- -	6.9	-	0.4	1.25	-	0.18	0.23	0.45	-	-	1
19	36.0 33.0	3.89 -	4.6	-	0.1	0.23	-	0.03	-	-	-	-	1
20	3.0 2.4	- 4.00	7.2	-	0.3	0.47	-	0.06	0.26	0.12	1.300	-	1
23	2.0 1.0	- 4.50	6.0	-	1.6	0.90	-	0.15	1.24	1.03	0.044	-	1
25	2.8 2.6	- 4.20	6.5	4.028	1.0	0.75	1.211	0.22	0.80	0.58	0.028	1.03	1
29	35.5 34.5	4.27 4.60	1.6	1.142	bd1	0.28	0.330	0.03	0.26	0.14	0.028	-	1

TOTAL PRECIP	112.5	106.5											
NO. OBS.	11	11	-	-	11	-	11	-	11	-	-	-	-
A. MEAN	10.2	9.7	-	-	6.0	-	1.1	0.66	-	0.10	-	-	-
STD. DEV.	13.5	12.8	-	-	5.1	-	2.5	0.55	-	0.10	-	-	-
MINIMUM	1.0	1.0	-	-	1.6	-	bd1	0.22	-	0.02	-	-	-
MAXIMUM	36.0	34.5	-	-	20.2	-	8.5	2.00	-	0.31	-	-	-
P.W. MEAN			-	-	3.5	-	0.2	0.33	-	0.04	-	-	-

PRECIP TYPE
 1 - RAIN
 2 - SNOW
 3 - MIXED
 4 - UNCERTAIN

T - TRACE AMOUNT

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
 IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

APPENDIX 3

MONTHLY SUMMARIES OF MEASURED CONCENTRATIONS IN AIR AND PRECIPITATION AT LONG POINT

LONG POINT

JULY 1979

AIR CONCENTRATIONS (10^{-6}gm^{-3})

DAY	PARTICULATE					GAS			PARTICULATE		
	$\text{SO}_4^{=}$	NO_3^-	Cl^-	Na^+	NH_4^+	SO_2	Br	V	Al	Mn	Ca
1	5.74	1.13	bd1	bd1	1.39	8.6	-	-	-	-	-
2	1.74	bd1	bd1	bd1	0.96	bd1	-	-	-	-	-
3	1.92	0.87	bd1	bd1	bd1	5.4	-	-	-	-	-
4	2.10	1.10	bd1	bd1	1.12	5.8	-	-	-	-	-
5	2.97	1.13	bd1	bd1	1.24	6.0	-	-	-	-	-
6	5.19	1.63	bd1	bd1	2.02	8.3	-	-	-	-	-
7	4.90	2.45	bd1	bd1	2.44	8.9	-	-	-	-	-
8	6.94	2.12	bd1	bd1	2.73	18.1	-	-	-	-	-
9	9.98	4.11	bd1	bd1	3.36	13.0	-	-	-	-	-
10	20.22	4.08	bd1	bd1	4.45	7.8	-	-	-	-	-
11	34.14	8.09	bd1	bd1	8.36	13.6	-	-	-	-	-
12	40.93	10.39	bd1	bd1	8.83	11.4	-	-	-	-	-
13	33.44	7.09	bd1	bd1	6.31	10.9	-	-	-	-	-
14	53.73	5.43	bd1	bd1	8.93	12.4	-	-	-	-	-
15	21.03	6.57	bd1	bd1	6.43	12.1	-	-	-	-	-
16	7.66	7.68	bd1	bd1	3.75	7.0	-	-	-	-	-
17	3.26	2.54	0.47	bd1	1.10	21.1	-	-	-	-	-
18	2.10	2.23	bd1	bd1	bd1	7.4	-	-	-	-	-
19	7.10	3.55	bd1	bd1	2.83	2.5	-	-	-	-	-
20	21.74	7.79	bd1	bd1	5.31	4.5	-	-	-	-	-
21	28.51	7.40	bd1	bd1	6.35	5.4	-	-	-	-	-
22	54.82	7.19	bd1	bd1	8.10	33.6	-	-	-	-	-
23	36.29	2.95	bd1	bd1	6.48	38.6	-	-	-	-	-
24	10.27	3.89	bd1	bd1	3.23	25.6	-	-	-	-	-
25	18.55	5.01	bd1	bd1	6.23	35.9	-	-	-	-	-
26	7.76	bd1	bd1	bd1	2.53	3.8	-	-	-	-	-
27	16.84	2.23	bd1	bd1	2.96	11.2	-	-	-	-	-
28	7.34	2.16	bd1	bd1	2.74	4.7	-	-	-	-	-
29	2.65	1.87	bd1	bd1	1.65	6.5	-	-	-	-	-
30	14.41	4.26	bd1	bd1	4.00	14.9	-	-	-	-	-
31	1.61	bd1	bd1	bd1	bd1	4.6	-	-	-	-	-

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	31	-	-	31	31	-	-	-	-	-
A. MEAN	15.67	3.77	-	-	3.74	11.9	-	-	-	-	-
S.D.	15.42	2.81	-	-	2.71	9.7	-	-	-	-	-
MIN.	1.61	bd1	-	-	bd1	bd1	-	-	-	-	-
MAX.	54.82	10.39	-	-	8.93	38.6	-	-	-	-	-

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10 ⁻³ gl ⁻¹)															ION BAL.		PRECIP	COMMENT
DAY	AMOUNT		FIELD	pH	LAB	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO +VE/-VE	TYPE		
	STD (mm)	COLL (mm)																
1	3.5	3.6	-	3.80		8.6	3.010	0.1	0.40	0.408	0.03	0.25	0.05	0.146	0.94	1	0	
3	0.7	-	-	-		-	-	-	-	-	-	-	-	-	-	1	0	
23	6.4	-	-	-		-	-	-	-	-	-	-	-	-	-	1	0	
25	9.6	9.4	-	4.40		2.8	0.996	0.1	0.15	0.066	0.04	0.02	0.05	0.022	0.73	1	0	
27	1.3	-	-	-		-	-	-	-	-	-	-	-	-	-	1	0	
30	18.8	17.6	-	4.20		6.2	2.674	0.2	0.22	0.889	0.07	0.10	0.16	0.085	0.77	1	0	
31	35.1	34.2	-	4.20		4.0	3.400	0.2	0.09	0.560	0.05	0.05	0.07	0.020	0.75	1	0	
TOTAL PRECIP																		
	75.4	64.8																
NO. OBS.	7	4	-	4		4	4	4	4	4	4	4	4	4	4	4		
A. MEAN	10.8	16.2	-	4.09		5.4	2.520	0.2	0.22	0.481	0.05	0.11	0.08	0.068	0.80			
STD. DEV.	12.4	13.3	-	4.28		2.6	1.058	0.1	0.13	0.342	0.02	0.10	0.05	0.060	0.10			
MINIMUM	0.7	3.6	-	3.80		2.8	0.996	0.1	0.09	0.066	0.03	0.02	0.05	0.020	0.73			
MAXIMUM	35.1	34.2	-	4.40		8.6	3.400	0.2	0.40	0.889	0.07	0.25	0.16	0.146	0.94			
P.W. MEAN			-	4.19		4.7	2.831	0.2	0.15	0.574	0.05	0.07	0.09	0.045				

PRECIP TYPE

T - TRACE AMOUNT

1 - RAIN

2 - SNOW

3 - MIXED

4 - UNCERTAIN

A. MEAN d1
P.W. MEAN d15.4 2.520 0.2 0.22 0.481 0.05 0.11 0.08 0.068
4.7 2.831 0.2 0.15 0.574 0.05 0.07 0.09 0.045

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN IN BRACKETS

LONG POINT

AUGUST 1979

AIR CONCENTRATIONS (10^{-6} g m^{-3})

DAY	PARTICULATE					GAS			PARTICULATE			
	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	SO ₂	Br	V	Al	Mn	Ca	
1	13.08	5.02	bd1	bd1	4.09	22.4	-	-	-	-	-	
2	4.95	0.88	bd1	bd1	1.65	10.6	-	-	-	-	-	
3	16.47	5.13	bd1	bd1	4.65	11.8	-	-	-	-	-	
4	20.51	5.34	bd1	bd1	5.18	12.3	-	-	-	-	-	
5	10.61	4.53	bd1	bd1	3.72	12.2	-	-	-	-	-	
6	2.76	2.16	bd1	bd1	1.91	12.6	0.0105	0.00043	0.135	bd1	0.36	
7	1.67	bd1	bd1	bd1	bd1	6.9	bd1	0.00066	0.211	bd1	bd1	
8	1.92	bd1	bd1	bd1	1.27	4.3	bd1	0.00093	0.220	bd1	0.45	
9	6.39	0.99	bd1	bd1	2.96	3.0	bd1	0.00089	0.238	0.0064	bd1	
10	3.74	bd1	bd1	bd1	2.40	3.6	0.0075	0.00049	0.153	0.0079	0.52	
11	1.11	bd1	bd1	bd1	1.16	14.8	0.0101	0.00061	0.109	0.0073	0.51	
12	1.91	1.01	bd1	bd1	1.56	5.6	0.0135	0.00204	0.175	0.0074	0.80	
13	7.39	2.61	bd1	bd1	3.70	13.4	0.0145	0.00193	0.223	0.0088	0.63	
14	* 1.80	0.82	bd1	bd1	<.1	6.3	bd1	0.00074	0.128	bd1	0.44	
15	* 1.21	bd1	bd1	bd1	bd1	5.9	0.0080	0.00028	0.113	0.0067	0.90	
16	* 1.54	0.79	bd1	bd1	1.32	2.6	bd1	0.00071	0.108	bd1	0.49	
17	* 4.05	1.70	bd1	bd1	2.06	23.5	0.0106	0.00117	0.238	0.0148	0.37	
18	* 22.12	1.03	bd1	bd1	7.19	7.3	0.0239	0.00313	0.239	0.0104	0.35	
19	* 11.04	1.06	bd1	bd1	5.10	6.6	0.0104	0.00168	0.095	0.0049	0.31	
20	9.78	4.86	bd1	bd1	* 4.73	11.5	0.0261	0.00491	0.351	0.0521	1.65	
21	5.79	4.12	bd1	bd1	* 3.77	8.8	0.0287	0.00783	0.456	0.0291	2.49	
22	10.81	3.39	bd1	bd1	* 3.97	11.9	0.0278	0.00570	1.494	0.0242	2.87	
23	16.73	2.42	bd1	bd1	* 5.18	-	0.0118	0.00484	0.513	0.0275	0.34	
24	7.49	2.40	bd1	bd1	* 3.78	13.0	0.0116	0.00383	0.307	0.0168	0.37	
25	5.83	4.35	bd1	bd1	* 4.03	8.6	0.0192	0.00179	0.199	0.0125	0.69	
26	6.33	5.12	bd1	bd1	* 4.57	6.4	0.0257	0.00339	0.233	0.0095	0.58	
27	6.18	1.72	3.27	1.72	1.98	12.2	-	-	-	-	-	
28	17.14	2.39	bd1	bd1	3.81	13.5	-	-	-	-	-	
29	15.13	4.08	bd1	bd1	4.25	12.3	-	-	-	-	-	
30	9.54	4.48	bd1	bd1	3.67	6.7	-	-	-	-	-	
31	6.43	3.63	bd1	bd1	2.50	23.3	-	-	-	-	-	

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	31	-	-	31	30	-	-	-	-	-
A. MEAN	8.11	2.45	-	-	3.10	10.5	-	-	-	-	-
S.D.	5.98	1.84	-	-	1.74	5.5	-	-	-	-	-
MIN.	1.11	bd1	-	-	bd1	2.6	-	-	-	-	-
MAX.	22.12	5.34	-	-	7.19	23.5	-	-	-	-	-

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10^{-3} g l^{-1})

														(10 ⁻³ g l ⁻¹)		ION BAL.			
DAY	AMOUNT		FIELD	pH LAB	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO +VE/-VE	PRECIP TYPE	COMMENT			
	STD (mm)	COLL (mm)																	
1	6.8	7.2	-	3.90	8.8	4.604	0.4	0.35	0.364	0.08	0.18	0.09	0.037	0.67	1	0			
4	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0			
7	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0			
13	9.4	4.2	-	4.30	7.7	3.378	0.4	1.30	1.254	0.21	0.25	0.20	0.130	0.96	1	0			
17	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0			
22	4.3	3.6	-	7.00	7.2	3.763	0.5	2.92	3.194	0.40	0.25	0.40	0.421	1.36	1	0			
24	2.0	1.6	-	4.70	12.3	7.924	0.6	-	4.842	-	-	-	-	-	1	0			
26	14.5	8.8	-	4.30	2.5	1.018	0.1	0.10	0.068	0.02	0.03	0.02	0.013	0.87	1	0			
28	8.4	10.1	-	4.10	5.5	2.479	0.2	0.10	1.229	0.02	0.03	0.05	0.041	0.99	1	0			
29	3.2	3.6	-	4.20	4.6	2.390	0.2	0.30	1.150	0.06	0.08	0.05	0.085	1.08	1	0			
TOTAL PRECIP	51.4	39.1																	
NO. OBS.	10	7	-	7	7	7	7	6	7	6	6	6	6	6					
A. MEAN	5.1	5.6	-	4.26	6.9	3.651	0.3	0.85	1.729	0.13	0.14	0.14	0.121	0.99					
STD. DEV.	4.6	3.1	-	4.39	3.2	2.204	0.2	1.11	1.697	0.15	0.10	0.14	0.153	0.23					
MINIMUM	0.5	1.6	-	3.90	2.5	1.018	0.1	0.10	0.068	0.02	0.03	0.02	0.013	0.67					
MAXIMUM	14.5	10.1	-	7.00	12.3	7.924	0.6	2.92	4.842	0.40	0.25	0.40	0.421	1.36					
P.W. MEAN			-	4.21	5.9	2.846	0.3	0.65	1.084	0.10	0.12	0.11	0.088						

PRECIP TYPE

T - TRACE AMOUNT

1 - RAIN

2 - SNOW

3 - MIXED

4 - UNCERTAIN

A. MEAN dl

P.W. MEAN dl

6.9	3.651	0.3	0.85	1.729	0.13	0.14	0.14	0.121
5.9	2.846	0.3	0.65	1.084	0.10	0.12	0.11	0.088

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN IN BRACKETS

LONG POINT

SEPTEMBER 1979

AIR CONCENTRATIONS (10^{-6} gm^{-3})

DAY	PARTICULATE					GAS			PARTICULATE			
	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	SO ₂	Br	V	Al	Mn	Ca	
1	19.88	3.07	bd1	bd1	4.36	19.2	-	-	-	-	-	
2	12.23	2.51	bd1	bd1	3.67	6.8	-	-	-	-	-	
3	4.61	2.83	bd1	bd1	2.79	7.7 *	0.0079	0.00257	0.277	0.0108	0.54	
4	2.39	2.36	bd1	bd1	1.57	13.5 *	0.0087	0.00132	0.153	bd1	0.47	
5	16.98	10.30	bd1	bd1	7.91	11.2 *	0.0444	0.01349	0.555	0.0383	1.50	
6	13.92	5.37	bd1	bd1	6.39	8.2 *	0.0202	0.00371	0.359	0.0118	1.40	
7	2.35	bd1	bd1	bd1	1.28	4.1	bd1	0.00049	0.121	bd1	0.76	
8	3.52	1.85	bd1	bd1	2.01	5.9 *	0.0303	0.00169	0.270	0.0177	1.03	
9	9.13	4.08	bd1	bd1	2.98	25.3 *	0.0176	0.00197	0.364	0.0163	0.67	
10	10.25	3.89	bd1	bd1	4.22	24.6	0.0137	0.00281	0.607	0.0265	0.98	
11	1.27	2.30	bd1	bd1	1.21	30.5	0.0147	0.00259	0.388	0.0192	1.99	
12	14.81	5.22	bd1	bd1	5.09	14.9	0.0360	0.00678	0.880	0.0265	2.30	
13	21.44	1.94	bd1	bd1	5.56	16.6	0.0241	0.00858	0.529	0.0175	0.35	
14	2.56	1.11	bd1	bd1	1.61	10.9	bd1	bd1	0.050	bd1	0.42	
15	2.33	1.76	0.41	bd1	1.76	5.3	0.0064	0.00144	0.148	bd1	0.34	
16	5.86	5.16	bd1	bd1	3.40	20.9	0.0137	0.00165	0.368	0.0091	0.45	
17	16.39	6.41	bd1	bd1	5.94	30.2	0.0232	0.00367	0.572	0.0393	0.46	
18	0.87	bd1	bd1	bd1	bd1	7.9	bd1	bd1	bd1	bd1	bd1	
19	1.32	1.11	bd1	bd1	1.61	5.7	0.0063	0.00048	0.235	0.0062	1.14	
20	8.82	4.96	bd1	bd1	1.26	37.3	0.0115	0.00186	0.521	0.0254	0.61	
21	7.88	5.00	bd1	bd1	4.03	21.0	0.0181	0.00202	0.496	0.0211	1.04	
22	2.23	2.03	bd1	bd1	4.36	13.3	0.0183	0.00102	0.207	0.0144	1.00	
23	1.78	2.38	bd1	bd1	bd1	10.7	0.0217	0.00356	0.300	0.0085	1.85	
24	16.00	10.91	bd1	bd1	5.64	35.0	-	-	-	-	-	
25	6.79	4.49	bd1	bd1	3.01	9.1	-	-	-	-	-	
26	1.01	bd1	bd1	bd1	bd1	5.1	-	-	-	-	-	
27	7.13	4.28	bd1	bd1	3.05	10.1	-	-	-	-	-	
28	5.56	3.73	bd1	bd1	2.40	15.0	-	-	-	-	-	
29	11.31	4.82	bd1	bd1	3.21	9.9	-	-	-	-	-	
30	21.42	12.13	0.66	bd1	6.12	16.9	-	-	-	-	-	

bd1 - BELOW DETECTION LIMIT

NO. OBS.	30	30	-	-	30	30	-	-	-	-	-
A. MEAN	8.40	3.87	-	-	3.22	15.1	-	-	-	-	-
S.D.	6.59	3.00	-	-	2.05	9.3	-	-	-	-	-
MIN.	0.87	bd1	-	-	bd1	4.1	-	-	-	-	-
MAX.	21.44	12.13	-	-	7.91	37.3	-	-	-	-	-

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10 ⁻⁵ gl ⁻¹)														ION BAL.			
DAY	AMOUNT		PH		SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TGT P	RATIO +VE/-VE	PRECIP TYPE	COMMENT	
	STD (mm)	COLL (mm)	FIELD	LAB													
2	22.0	23.8	-	4.00	6.6	3.010	0.2	0.22	0.822	0.66	0.05	0.03	0.011	0.84	1	0	
5	2.2	1.6	-	7.10	20.0	-	1.3	4.42	-	0.64	6.10	0.50	-	-	1	0	
13	47.5	47.2	-	5.60	1.3	0.841	0.2	0.25	0.496	0.05	0.18	0.03	0.049	1.18	1	0	
14	11.3	10.7	-	5.00	1.0	0.664	0.2	0.20	0.430	0.05	0.04	0.02	0.016	1.28	1	0	
18	3.2	2.6	-	6.50	8.4	5.976	0.5	-	3.374	-	0.42	0.42	0.394	-	1	0	
27	4.0	3.6	-	4.60	5.5	4.117	0.3	1.80	0.899	0.24	0.10	0.15	0.120	1.02	1	0	
28	2.4	2.6	-	4.10	4.6	2.966	0.2	-	0.713	-	0.08	0.05	0.039	-	1	0	
TOTAL PRECIP	92.6	92.1															
NO. OBS.	7	7	-	7	7	6	7	5	6	5	7	7	6	4			
A. MEAN	13.2	13.2	-	4.51	6.8	2.929	0.4	1.38	1.122	0.25	1.00	0.17	0.105	1.11			
STD. DEV.	16.7	17.0	-	4.38	6.4	2.010	0.4	1.83	1.118	0.34	2.25	0.20	0.147	0.23			
MINIMUM	2.2	1.6	-	4.00	1.0	0.664	0.2	0.20	0.430	0.05	0.04	0.02	0.011	0.84			
MAXIMUM	47.5	47.2	-	7.10	20.0	5.976	1.3	4.42	3.374	0.84	6.10	0.50	0.394	1.38			
P.W. MEAN			-	4.53	3.5	1.730	0.2	0.41	0.693	0.08	0.27	0.06	0.051				
PRECIP TYPE T - TRACE AMOUNT																	
1 - RAIN																	
2 - SNOW																	
3 - MIXED																	
4 - UNCERTAIN																	
A. MEAN dl					6.8	2.929	0.4	1.38	1.122	0.25	1.00	0.17	0.105				
P.W. MEAN dl					3.5	1.730	0.2	0.41	0.693	0.08	0.27	0.06	0.051				

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN IN BRACKETS

LONG POINT

OCTOBER 1979

AIR CONCENTRATIONS (10^{-6} gm^{-3})

DAY	PARTICULATE					GAS			PARTICULATE			
	$\text{SO}_4^{=}$	NO_3^-	Cl^-	Na^+	NH_4^+	SO_2	Br	V	Al	Mn	Ca	
1	21.47	15.50	0.75	bd1	6.35	14.8	-	-	-	-	-	-
2	29.17	9.43	bd1	bd1	9.42	53.7	-	-	-	-	-	-
3	12.88	7.04	bd1	bd1	4.31	15.9	-	-	-	-	-	-
4	3.70	4.21	bd1	bd1	2.14	11.8	-	-	-	-	-	-
5	3.20	4.79	bd1	bd1	2.22	18.6	-	-	-	-	-	-
6	4.26	3.36	bd1	bd1	2.22	16.3	-	-	-	-	-	-
7	0.72	bd1	bd1	bd1	bd1	-	-	-	-	-	-	-
8	2.48	2.86	1.46	0.77	1.38	12.3	0.0138	0.00176	0.257	0.0141	0.27	-
9	1.51	bd1	bd1	bd1	bd1	-	bd1	0.00031	0.066	bd1	bd1	-
10	1.39	1.07	bd1	bd1	1.01	-	0.0088	0.00048	bd1	bd1	bd1	-
11	4.38	2.31	bd1	bd1	2.10	-	0.0127	0.00094	0.228	0.0145	bd1	-
12	2.20	1.82	bd1	bd1	1.73	25.6	0.0085	0.00073	0.084	bd1	bd1	-
13	1.46	bd1	bd1	bd1	bd1	10.7	bd1	0.00046	bd1	bd1	bd1	-
14	1.43	1.83	bd1	bd1	1.34	-	0.0061	0.00069	0.112	bd1	0.34	-
15	10.39	12.24	0.70	bd1	5.74	14.4	0.0290	0.00426	0.889	0.0273	1.40	-
16	6.98	8.65	0.59	bd1	4.13	35.7	0.0305	0.00995	0.644	0.0301	1.37	-
17	8.73	9.33	bd1	bd1	5.00	17.5	0.0279	0.00305	0.507	0.0145	0.39	-
18	15.86	9.39	0.56	bd1	5.56	17.4	0.0467	0.00494	0.451	0.0293	0.57	-
19	11.51	3.96	bd1	bd1	3.89	34.3	0.0351	0.00659	0.981	0.0291	0.84	-
20	10.45	3.96	bd1	0.33	3.67	35.8	0.0231	0.00536	0.781	0.0287	0.43	-
21	8.93	4.61	0.43	0.57	3.51	26.6	0.0223	0.00554	0.698	0.0265	0.66	-
22	7.51	4.61	0.38	0.62	2.85	23.2	0.0204	0.00480	0.661	0.0377	0.65	-
23	-	-	-	-	-	-	bd1	bd1	bd1	bd1	bd1	-
24	0.59	bd1	bd1	bd1	bd1	3.8	bd1	0.00038	bd1	bd1	bd1	-
25	-	-	-	-	-	-	bd1	bd1	bd1	bd1	bd1	-
26	-	-	-	-	-	-	bd1	bd1	bd1	bd1	bd1	-
27	-	-	-	-	-	-	bd1	bd1	bd1	bd1	bd1	-
28	-	-	-	-	-	-	bd1	bd1	bd1	bd1	bd1	-
29	6.52	3.61	bd1	bd1	1.96	18.0	0.0126	0.00093	0.068	0.0053	0.35	-
30	5.47	3.77	bd1	bd1	2.53	15.3	0.0224	0.00376	0.223	0.0135	bd1	-
31	14.35	5.66	bd1	bd1	4.68	30.3	0.0455	0.01766	0.558	0.0236	0.57	-

bd1 - BELOW DETECTION LIMIT

NO. OBS.	26	26	-	-	26	-	24	24	24	24	24	
A. MEAN	7.60	4.77	-	-	2.85	-	0.015	0.00302	0.300	0.0123	0.33	
S.D.	6.93	3.97	-	-	1.92	-	0.015	0.00412	0.330	0.0133	0.42	
MIN.	0.59	bd1	-	-	bd1	-	bd1	bd1	bd1	bd1	bd1	
MAX.	29.17	15.50	-	-	6.35	-	0.047	0.01766	0.981	0.0377	1.40	

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		FIELD	PH LAB	(10 ⁻⁵ g l ⁻¹)								ION BAL.			
	STD (mm)	COLL (mm)			SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO +VE/-VE	PRECIP TYPE	COMMENT
3	6.1	2.9	-	3.90	9.1	9.385	0.5	1.12	1.556	0.22	0.14	0.18	0.102	0.91	1	0
4	18.1	14.3	-	3.90	7.5	5.224	0.4	0.32	1.661	0.04	0.06	0.08	0.015	0.96	1	0
5	2.2	1.3	-	3.90	4.8	-	0.5	-	-	-	-	-	-	-	1	0
6	17.2	15.6	-	4.30	3.9	3.807	0.3	0.62	1.069	0.07	0.04	0.05	0.017	0.98	1	0
7	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0
8	5.1	3.6	-	4.00	5.0	4.825	0.3	0.62	0.950	0.09	0.04	0.08	0.030	1.02	1	0
11	17.4	13.7	-	4.10	3.4	5.622	0.3	0.42	0.708	0.08	0.10	0.05	0.037	0.90	1	0
12	10.3	9.4	-	4.60	2.6	2.302	0.2	0.17	1.086	0.04	0.14	0.15	0.091	1.06	1	0
18	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0
19	4.4	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0
22	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0
23	5.4	4.9	-	4.20	13.6	8.411	0.5	3.60	0.811	0.52	0.48	1.24	-	0.86	1	0
27	4.0	3.6	-	3.60	14.1	5.755	0.7	2.00	1.661	0.17	0.22	0.25	0.056	1.17	1	0
TOTAL PRECIP	92.7	69.3														
NO. OBS.	13	9	-	9	9	8	9	1.11	1.243	0.15	0.15	0.26	0.050	0.98		
A. MEAN	7.1	7.7	-	3.96	7.1	5.666	0.5	1.11	1.243	0.15	0.15	0.26	0.050	0.98		
STD. DEV.	6.5	5.6	-	4.18	4.3	2.301	0.2	1.16	0.468	0.16	0.15	0.40	0.035	0.10		
MINIMUM	0.3	1.3	-	3.60	2.8	2.302	0.2	0.17	0.708	0.04	0.04	0.05	0.015	0.86		
MAXIMUM	18.1	15.6	-	4.60	14.1	9.385	0.9	3.60	1.996	0.52	0.48	1.24	0.102	1.17		
P.W. MEAN			-	4.05	6.0	5.166	0.4	0.75	1.196	0.11	0.11	0.17	0.040			

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
- 2 - SNOW
- 3 - MIXED
- 4 - UNCERTAIN

A. MEAN dl

7.1 5.666 0.5 1.11 1.243 0.15 0.15 0.26 0.050
 P.W. MEAN dl 6.0 5.166 0.4 0.75 1.196 0.11 0.11 0.17 0.040

DAY () - DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN IN BRACKETS

LONG POINT

NOVEMBER 1979

AIR CONCENTRATIONS (10^{-6} gm^{-3})

DAY	PARTICULATE					GAS			PARTICULATE		
	$\text{SO}_4^{=}$	NO_3^{-}	Cl^{-}	Na^{+}	NH_4^{+}	SO_2	Br	V	Al	Mn	Ca
1	5.98	2.12	bd1	bd1	2.01	8.7	0.0147	0.00358	0.197	0.0093	bd1
2	3.59	6.58	bd1	bd1	2.83	13.3	0.0129	0.00201	0.226	0.0090	0.50
3	2.78	4.99	bd1	bd1	2.29	14.5	0.0145	0.00148	0.151	0.0048	bd1
4	3.62	3.92	bd1	bd1	1.77	-	0.0081	0.00126	0.158	0.0052	bd1
5	-	-	-	-	-	-	0.0209	-	-	-	-
6	-	-	-	-	-	-	0.0006	0.00005	0.008	0.0004	0.01
7	5.84	2.98	bd1	1.21	1.88	-	0.0102	0.00286	0.137	0.0084	bd1
8	4.99	4.67	bd1	bd1	2.66	-	0.0197	0.00215	0.161	0.0093	bd1
9	6.58	3.35	bd1	bd1	2.59	-	0.0113	0.00059	0.046	bd1	0.62
10	3.32	4.85	bd1	bd1	2.22	4.4	0.0071	0.00082	0.047	bd1	bd1
11	2.27	2.71	bd1	bd1	1.78	4.8	-	-	-	-	-
12	4.37	6.36	0.59	bd1	2.86	26.8	0.0156	0.00362	0.240	0.0219	0.62
13	5.16	7.74	bd1	bd1	3.67	18.0	0.0298	0.00363	0.150	0.0147	0.49
14	2.83	4.01	bd1	bd1	2.22	15.3	0.0135	0.00180	0.135	bd1	bd1
15	3.36	4.40	bd1	bd1	2.23	14.0	0.0135	0.00072	bd1	bd1	bd1
16	2.89	4.48	bd1	bd1	1.59	13.4	0.0109	0.00097	0.093	0.0046	0.30
17	3.56	16.44	bd1	bd1	6.35	16.3	0.0315	0.00198	0.323	0.0069	0.47
18	9.04	10.57	bd1	bd1	5.25	11.3	0.0386	0.00617	0.483	0.0301	0.80
19	10.26	10.94	0.47	0.45	4.35	40.7	0.0406	0.00617	1.022	0.0671	1.22
20	7.00	15.90	0.47	bd1	5.93	13.2	0.0322	0.00333	0.401	0.0190	0.55
21	7.64	8.27	0.54	bd1	4.27	19.1	0.0245	0.00474	0.309	0.0177	0.56
22	9.46	4.64	bd1	bd1	3.85	33.5	0.0368	0.00612	0.368	0.0240	bd1
23	6.26	3.38	bd1	bd1	2.52	16.7	0.0120	0.00331	0.219	0.0083	bd1
24	5.13	4.83	0.41	bd1	2.01	32.2	0.0147	0.00166	0.288	0.0063	bd1
25	6.71	7.21	0.72	bd1	4.09	22.0	0.0165	0.00396	0.113	0.0067	bd1
26	4.57	4.86	bd1	bd1	1.76	14.0	0.0146	0.00094	0.255	bd1	bd1
27	4.57	6.75	bd1	bd1	2.82	13.9	0.0173	0.00238	0.288	0.0146	bd1
28	4.03	4.01	bd1	bd1	2.16	18.6	0.0116	0.00111	0.100	0.0067	bd1
29	2.59	2.54	bd1	bd1	1.22	8.2	0.0123	0.00104	0.382	0.0156	0.62
30	4.44	4.73	bd1	bd1	2.07	8.5	0.0140	0.00181	0.434	0.0166	0.63

bd1 - BELOW DETECTION LIMIT

NO. OBS.	28	28	-	-	28	24	29	28	28	28	28
A. MEAN	5.10	6.01	-	-	2.90	16.7	0.018	0.00251	0.240	0.0117	0.26
S.D.	2.14	3.61	-	-	1.33	8.9	0.010	0.00174	0.200	0.0135	0.34
MIN.	2.27	2.12	-	-	1.22	4.4	0.001	0.00005	bd1	bd1	bd1
MAX.	10.26	16.44	-	-	6.35	40.7	0.041	0.00617	1.022	0.0671	1.22

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10 ⁻⁵ g l ⁻¹)														ION BAL.			
DAY	AMOUNT		pH		SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO	PRECIP	COMMENT	
	STD (mm)	COLL (mm)	FIELD	LAB										+VE/-VE	TYPE		
1	11.4	10.4	-	4.20	4.7	3.187	0.9	0.85	0.386	0.16	0.50	0.08	0.037	0.94	1	0	
6	6.4	6.5	-	3.80	5.7	9.031	0.4	0.70	1.545	0.08	0.29	0.09	0.056	1.10	1	0	
8	23.2	21.5	-	4.00	3.6	3.320	0.2	0.10	0.502	bd1	0.19	0.05	0.027	-	1	0	
15	10.4	8.6	-	4.10	3.5	4.560	0.3	0.20	0.898	0.04	0.39	0.07	0.063	1.05	1	0	
19	2.4	2.3	-	4.20	5.2	3.674	0.3	0.70	0.506	0.12	-	-	0.075	-	1	0	
21	8.2	7.8	-	4.10	3.5	2.258	0.1	0.30	0.246	0.04	0.05	0.03	0.006	1.02	1	0	
22	16.2	16.0	-	4.10	2.9	1.328	0.1	0.10	0.194	0.01	0.15	0.04	0.017	1.21	1	0	
23	13.4	13.4	-	4.10	2.9	2.877	0.4	0.15	0.240	0.05	0.30	0.05	0.008	1.00	1	0	
25	9.1	8.5	-	4.30	1.3	1.018	0.3	0.10	0.067	0.03	0.22	0.02	0.006	1.39	1	0	
27	3.0	2.3	-	4.00	5.7	8.322	0.6	1.90	0.578	0.16	-	-	0.036	-	1	0	
30	20.0	12.1	-	4.10	2.7	6.729	0.4	0.75	0.787	0.13	0.13	0.05	0.011	1.01	2	0	
TOTAL PRECIP	123.7	109.6															
NO. OBS.	11	11	-	11	11	11	11	11	11	11	9	9	11	8			
A. MEAN	11.2	10.0	-	4.07	3.8	4.209	0.4	0.53	0.541	0.07	0.25	0.05	0.031	1.09			
STD. DEV.	6.6	5.7	-	4.54	1.4	2.699	0.2	0.54	0.418	0.06	0.14	0.02	0.025	0.15			
MINIMUM	2.4	2.3	-	3.80	1.3	1.018	0.1	0.10	0.067	bd1	0.05	0.02	0.006	0.94			
MAXIMUM	23.2	21.5	-	4.30	5.7	9.031	0.9	1.90	1.545	0.16	0.50	0.09	0.075	1.39			
P.W. MEAN			-	4.08	3.4	3.838	0.3	0.39	0.509	0.06	0.23	0.05	0.025				

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
- 2 - SNOW
- 3 - MIXED
- 4 - UNCERTAIN

A. MEAN d1	3.8	4.209	0.4	0.53	0.541	0.08	0.25	0.05	0.031
P.W. MEAN d1	3.4	3.838	0.3	0.39	0.509	0.06	0.23	0.05	0.025

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN IN BRACKETS

LONG POINT

DECEMBER 1979

AIR CONCENTRATIONS (10^{-6} gm^{-3})

DAY	PARTICULATE					GAS			PARTICULATE			
	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	SO ₂	Br	V	Al	Mn	Ca	
1	4.88	6.28	bd1	bd1	2.67	12.8	0.0126	0.00122	0.126	0.0114	bd1	
2	1.90	2.93	0.38	bd1	1.20	35.0	0.0070	0.00336	0.062	bd1	bd1	
3	-	-	-	-	-	-	bd1	0.00045	0.357	0.0056	bd1	
4	-	-	-	-	-	-	bd1	bd1	0.079	bd1	bd1	
5	-	-	-	-	-	-	bd1	bd1	0.076	bd1	bd1	
6	-	-	-	-	-	-	bd1	bd1	0.047	bd1	bd1	
7	-	-	-	-	-	-	0.0004	0.00015	0.017	0.0003	0.02	
8	2.38	5.10	0.39	bd1	2.30	30.8	0.0150	0.00243	0.351	0.0083	0.57	
9	3.30	4.35	0.41	bd1	2.29	36.0	0.0120	0.00201	0.513	0.0224	0.37	
10	5.68	9.30	0.75	bd1	2.75	63.1	0.0232	0.00416	1.047	0.0384	0.53	
11	5.49	5.49	0.48	bd1	2.59	33.4	0.0272	0.00527	0.757	0.0184	0.82	
12	3.30	2.18	0.38	bd1	1.37	20.2	0.0105	0.00131	0.096	0.0059	0.83	
13	5.53	4.78	0.51	bd1	2.53	29.0	0.0207	0.00328	0.299	0.0168	0.57	
14	3.18	5.79	bd1	bd1	1.87	14.9	0.0142	0.00422	0.533	0.0138	1.44	
15	6.21	6.55	0.82	bd1	2.95	67.0	0.0276	0.00381	0.698	0.0339	bd1	
16	3.81	3.41	0.41	bd1	2.18	29.6	0.0105	0.00178	0.454	0.0155	bd1	
17	8.25	14.98	2.09	1.00	3.67	97.1	0.0401	0.00572	1.476	0.0290	1.36	
18	7.72	8.37	0.68	bd1	3.25	112.8	0.0316	0.00870	0.379	0.0223	bd1	
19	10.44	7.53	0.96	0.69	3.37	58.4	0.0245	0.01311	0.229	0.0101	bd1	
20	7.46	4.28	0.52	0.42	bd1	48.3	0.0247	0.00979	0.345	0.0114	0.36	
21	3.20	2.37	bd1	bd1	1.49	41.1	0.0282	0.00694	0.382	0.0278	bd1	
22	6.11	3.83	bd1	bd1	2.24	14.2	0.0201	0.00307	0.157	0.0077	bd1	
23	3.17	1.70	bd1	bd1	1.55	11.8	0.0135	0.00213	bd1	bd1	bd1	
24	-	-	-	-	-	-	0.0095	-	-	-	-	
25	-	-	-	-	-	-	-	-	-	-	-	
26	2.59	bd1	bd1	bd1	0.99	* 3.8	bd1	0.00039	bd1	bd1	0.30	
27	5.50	1.66	bd1	bd1	1.81	* 9.4	0.0153	0.00359	* 0.090	bd1	bd1	
28	2.55	0.83	bd1	bd1	1.27	* 1.9	0.0060	0.00060	* 0.139	0.0048	0.86	
29	4.33	4.54	bd1	bd1	3.24	* 6.1	0.0170	0.00174	* 0.160	bd1	bd1	
30	4.82	6.73	0.75	bd1	3.50	* 15.2	0.0356	0.00376	* 0.200	0.0098	0.47	
31	-	-	-	-	-	-	-	-	-	-	-	

bd1 - BELOW DETECTION LIMIT

NO. OBS.	-	-	-	-	-	-	29	28	28	28	28
A. MEAN	-	-	-	-	-	-	0.015	0.00332	0.324	0.0112	0.30
S.D.	-	-	-	-	-	-	0.011	0.00320	0.340	0.0113	0.43
MIN.	-	-	-	-	-	-	bd1	bd1	bd1	bd1	bd1
MAX.	-	-	-	-	-	-	0.040	0.01311	1.476	0.0384	1.44

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10 ⁻² gl ⁻¹)														ION BAL.			
DAY	AMOUNT		PH		SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO +VE/-VE	PRECIP TYPE	COMMENT	
	STD (mm)	COLL (mm)	FIELD	LAB													
1	2.4	2.6	-	4.30	2.2	3.719	0.5	0.50	0.379	0.09	-	-	0.022	-	2	0	
11	5.2	4.6	-	4.10	5.4	5.932	0.5	1.00	1.141	0.17	0.32	0.10	0.045	1.00	1	0	
18	1.8	0.7	-	4.80	5.8	-	2.6	4.10	-	0.43	-	-	-	-	2	0	
21	15.1	14.3	-	4.20	2.1	2.213	0.2	0.30	0.166	0.07	0.12	0.02	0.015	1.18	1	0	
22	8.2	8.5	-	4.20	1.7	1.992	0.1	0.10	0.206	0.02	0.10	0.03	0.012	1.23	1	0	
23	9.2	8.8	-	4.20	2.0	1.549	0.1	0.60	0.242	bd1	0.05	0.03	0.003	-	1	0	
24	24.1	39.7	-	4.30	1.1	0.753	bd1	bd1	0.152	bd1	0.05	0.01	0.003	-	1	0	
25	11.0	10.4	-	4.80	0.3	0.221	bd1	bd1	0.072	bd1	0.07	bd1	0.011	-	1	0	
TOTAL PRECIP	77.0	89.6															
NO. OBS.	8	8	-	8	8	7	8	8	7	8	6	6	7	3			
A. MEAN	9.6	11.2	-	4.30	2.6	2.340	0.5	0.83	0.337	0.10	0.12	0.03	0.016	1.14			
STD. DEV.	7.3	12.3	-	4.64	2.0	1.940	0.9	1.37	0.367	0.15	0.10	0.04	0.014	0.12			
MINIMUM	1.8	0.7	-	4.10	0.3	0.221	bd1	bd1	0.072	bd1	0.05	bd1	0.003	1.00			
MAXIMUM	24.1	39.7	-	4.80	5.8	5.932	2.6	4.10	1.141	0.43	0.32	0.10	0.045	1.23			
P.W. MEAN			-	4.29	1.8	1.654	0.2	0.32	0.236	0.04	0.09	0.02	0.011				

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
- 2 - SNOW
- 3 - MIXED
- 4 - UNCERTAIN

A. MEAN dl	2.6	2.340	0.5	0.84	0.337	0.10	0.12	0.04	0.016
P.W. MEAN dl	1.8	1.654	0.2	0.34	0.236	0.05	0.09	0.03	0.011

DAY() - DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN IN BRACKETS

LONG POINT

JANUARY 1980

AIR CONCENTRATIONS (10^{-6}gm^{-3})

DAY	PARTICULATE					GAS	PARTICULATE				
	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	SO ₂	Br	V	Al	Mn	Ca
1	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-
3	3.49	2.20	0.69	0.56	1.77	29.4	0.0195	0.00411	0.160	0.0252	0.82
4	3.14	3.81	1.29	0.45	2.47	65.5	0.0315	0.00818	0.346	0.0195	0.74
5	1.91	2.01	0.81	0.51	1.41	16.0	0.0238	0.00485	0.524	0.0388	3.27
6	6.04	3.69	bd1	bd1	2.18	51.1	0.0212	0.00379	0.388	0.0237	0.85
7	3.13	1.93	bd1	bd1	1.74	16.2	0.0106	0.00221	0.970	0.0137	0.67
8	1.82	2.12	bd1	bd1	1.53	31.5	0.0114	0.00137	0.314	0.0058	0.57
9	3.15	3.44	bd1	bd1	1.86	28.3	0.0091	0.00353	0.185	0.0051	bd1
10	4.33	3.24	0.44	0.44	1.87	43.9	0.0285	0.00432	0.441	0.0193	0.34
11	2.47	1.60	bd1	bd1	1.29	12.1	0.0223	0.00718	4.461	0.0610	1.37
12	2.81	2.75	bd1	bd1	1.67	27.7	bd1	0.00430	2.024	0.0301	2.01
13	3.27	3.05	0.43	bd1	1.86	46.3	0.0250	0.00377	1.089	0.0268	0.58
14	7.10	7.48	0.49	bd1	3.10	41.1	0.0261	0.00368	0.491	0.0245	0.39
15	4.77	6.21	0.67	bd1	3.71	37.6	0.0275	0.00845	0.329	0.0164	bd1
16	4.28	4.41	0.65	bd1	2.91	32.7	0.0311	0.01759	0.422	0.0278	0.82
17	4.43	2.41	bd1	bd1	2.42	28.2	0.0133	0.00179	0.172	0.0062	bd1
18	4.77	3.14	bd1	bd1	2.33	9.6	0.0120	0.00216	0.131	0.0095	0.33
19	3.94	2.91	bd1	bd1	2.19	11.6	0.0091	0.00184	0.077	bd1	bd1
20	1.16	1.54	bd1	bd1	1.17	5.9	bd1	0.00190	0.160	bd1	0.30
21	2.79	7.04	0.40	bd1	2.43	-	bd1	0.00197	0.166	bd1	0.31
22	3.85	3.82	bd1	bd1	2.04	-	bd1	0.00121	0.303	0.0078	bd1
23	1.14	bd1	bd1	bd1	bd1	7.1	bd1	0.00394	1.699	0.3163	0.70
24	2.67	3.96	0.40	bd1	1.41	19.5	0.0111	0.00120	0.216	0.0094	1.10
25	5.39	5.43	bd1	bd1	2.49	-	0.0265	0.00472	0.310	0.0257	bd1
26	1.81	1.67	bd1	bd1	0.94	-	bd1	0.00157	0.059	bd1	bd1
27	4.95	4.31	0.52	bd1	1.62	32.7	0.0117	0.00157	0.127	bd1	0.30
28	4.07	3.93	0.61	0.37	1.79	38.6	0.0122	0.00345	0.254	0.0084	0.75
29	3.22	2.78	0.31	bd1	1.82	17.0	0.0112	0.00323	0.211	0.0073	0.43
30	2.31	0.97	1.09	0.63	1.45	25.1	0.0102	0.00103	0.143	0.0058	1.40
31	1.19	bd1	0.48	bd1	1.11	16.4	bd1	0.00044	0.074	bd1	0.60

bd1 - BELOW DETECTION LIMIT

NO. OBS.	29	29	29	-	29	25	29	29	29	29	29
A. MEAN	3.43	3.17	0.32	-	1.88	27.6	0.014	0.00377	0.560	0.0150	0.64
S.D.	1.47	1.81	0.37	-	0.72	14.9	0.011	0.00335	0.883	0.0141	0.70
MIN.	1.14	bd1	bd1	-	bd1	5.9	bd1	0.00044	0.059	bd1	bd1
MAX.	7.10	7.48	1.29	-	3.71	65.5	0.031	0.01759	4.461	0.0610	3.27

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10 ⁻² gl ⁻¹)														ION BAL.		
DAY	AMOUNT		FIELD	pH LAB	SO ₄ ⁼	NC ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO	PRECIP	COMMENT
	STD (mm)	COLL (mm)												+VE/-VE	TYPE	
2	0.6	0.3	-	-	5.5	-	1.0	-	-	-	-	-	-	-	2	0
7	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	2	0
8	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	2	0
10	6.3	7.8	-	4.50	4.1	3.409	0.8	1.90	0.225	0.26	0.52	0.15	43.000	1.14	3	0
11	10.0	10.4	-	5.00	2.2	0.708	3.1	0.70	0.072	0.11	0.08	0.05	0.031	0.43	3	0
16	2.0	2.9	-	4.10	5.5	4.604	0.7	1.60	0.447	0.20	-	-	0.050	-	1	0
22	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	2	0
24	1.0	1.3	-	-	2.8	-	1.2	1.90	-	0.30	-	-	-	-	2	0
25	1.0	1.0	-	-	1.7	-	0.9	1.00	-	0.20	-	-	-	-	2	0
26	T	-	-	-	-	-	-	-	-	-	-	-	-	-	2	0
TOTAL PRECIP	22.5	23.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NO. OBS.	10	6	-	3	6	3	6	5	3	5	2	2	3	2	-	-
A. MEAN	2.3	4.0	-	4.39	3.6	2.907	1.3	1.42	0.248	0.21	0.30	0.10	14.360	0.79	-	-
STD. DEV.	3.3	4.2	-	4.45	1.7	1.996	0.9	0.54	0.189	0.07	0.31	0.07	24.803	0.50	-	-
MINIMUM	T	0.3	-	4.10	1.7	0.708	0.7	0.70	0.072	0.11	0.08	0.05	0.031	0.43	-	-
MAXIMUM	10.0	10.4	-	5.00	5.5	4.604	3.1	1.90	0.447	0.30	0.52	0.15	43.000	1.14	-	-
P.W. MEAN	-	-	-	4.60	3.2	2.064	1.9	1.23	0.166	0.18	0.25	0.09	14.826	-	-	-

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
2 - SNOW
3 - MIXED
4 - UNCERTAIN

A. MEAN dl	3.6	2.907	1.3	1.42	0.248	0.21	0.30	0.10	14.360
P.W. MEAN dl	3.2	2.064	1.9	1.23	0.166	0.18	0.25	0.09	14.826

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN IN BRACKETS

LONG POINT

FEBRUARY 1980

AIR CONCENTRATIONS (10^{-6}gm^{-3})

	PARTICULATE					GAS		PARTICULATE				
DAY	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	SO ₂	Br	V	Al	Mn	Ca	
1	1.63	bd1	0.33	bd1	0.93	10.2	0.0098	0.00084	0.238	0.0069	2.73	
2	0.52	bd1	bd1	1.56	bd1	14.1	bd1	bd1	bd1	bd1	0.40	
3	2.12	bd1	0.32	bd1	1.25	15.0	bd1	0.00042	0.118	bd1	0.51	
4	1.74	1.63	0.24	bd1	0.83	25.6	bd1	0.00052	0.091	bd1	0.88	
5	2.71	4.27	0.73	0.28	1.66	40.3	0.0150	0.00332	0.250	0.0174	1.04	
6	2.90	3.31	0.78	0.28	1.36	49.2	0.0169	0.00731	0.326	0.0155	1.17	
7	1.59	1.89	0.23	bd1	1.09	13.9	0.0121	0.00222	0.252	0.0100	2.42	
8	4.00	2.40	0.36	bd1	1.77	36.5	0.0102	0.00117	0.242	0.0146	2.47	
9	1.44	1.05	0.42	bd1	0.97	19.3	bd1	0.00053	0.192	0.0055	1.05	
10	5.47	4.22	bd1	bd1	1.67	42.2	0.0140	0.00156	0.220	0.0060	0.34	
11	3.02	* 4.23	0.35	bd1	1.22	37.1	bd1	0.00172	0.419	0.0082	0.43	
12	4.05	* 6.00	0.39	bd1	2.14	31.4	0.0101	0.00259	0.213	0.0126	bd1	
13	9.36	* 12.45	1.39	0.99	4.36	62.3	0.0293	0.00238	0.549	0.0246	0.54	
14	3.10	* 4.09	0.31	bd1	1.85	24.9	0.0115	0.00123	0.071	0.0077	bd1	
15	2.33	* 2.58	0.42	bd1	1.02	32.5	0.0099	0.00130	0.047	bd1	bd1	
16	1.57	* 1.80	0.35	bd1	0.89	18.6	bd1	0.00031	bd1	bd1	0.29	
17	4.68	* 5.95	0.37	bd1	2.12	22.3	0.0121	0.00190	0.198	0.0083	bd1	
18	4.66	6.17	0.67	bd1	1.98	76.7	0.0143	0.00257	0.462	0.0204	0.59	
19	5.80	5.93	0.69	bd1	2.43	63.4	0.0217	0.00315	0.607	0.0299	0.71	
20	7.34	11.27	0.78	bd1	4.32	23.0	0.0264	0.00310	0.320	0.0212	0.34	
21	5.94	7.12	0.47	bd1	3.55	31.2	0.0148	0.00282	0.080	0.0071	0.30	
22	3.46	2.61	0.27	bd1	1.97	13.2	bd1	0.00308	0.068	bd1	bd1	
23	7.20	7.22	0.45	bd1	3.35	9.5	0.0200	0.00174	0.084	bd1	bd1	
24	6.21	4.30	0.33	bd1	3.37	7.2	0.0130	0.00098	0.116	bd1	0.31	
25	3.41	2.76	0.32	bd1	1.61	11.8	0.0118	0.00150	2.882	0.0095	bd1	
26	2.38	2.49	0.27	bd1	1.02	23.0	0.0133	0.00134	0.277	0.0075	0.74	
27	1.88	1.47	bd1	bd1	1.03	9.3	bd1	0.00163	0.892	0.0163	0.88	
28	2.54	1.08	0.59	0.46	1.00	16.1	0.0122	0.00207	0.201	0.0130	0.75	
29	2.16	bd1	0.42	bd1	bd1	6.5	0.0260	0.00146	0.323	0.0069	2.13	

bd1 - BELOW DETECTION LIMIT

NO. OBS.	29	29	29	-	29	29	29	29	29	29	29
A. MEAN	3.63	3.73	0.42	-	1.75	27.1	0.011	0.00189	0.336	0.0093	0.73
S.D.	2.12	3.12	0.28	-	1.12	18.1	0.009	0.00139	0.527	0.0082	0.78
MIN.	0.52	bd1	bd1	-	bd1	6.5	bd1	bd1	bd1	bd1	bd1
MAX.	9.36	12.45	1.39	-	4.36	76.7	0.029	0.00731	2.882	0.0299	2.73

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

 (10^{-5}gl^{-1})

DAY	AMOUNT		PH		$\text{SO}_4^{=}$	NO_3^-	Cl^-	Ca^{++}	NH_4^+	Mg^{++}	Na^+	K^+	TOT P	ION BAL.		PRECIP	COMMENT
	STD (nm)	COLL (nm)	FIELD	LAB										RATIO +VE/-VE			
3	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	0
10	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	0
11	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	0
13	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	0
15	9.9	2.9	-	4.50	1.3	3.232	bd1	0.76	0.028	0.14	0.80	0.20	0.056	-	-	2	0
21	3.6	3.9	-	4.00	6.2	6.994	bd1	0.88	0.641	0.12	2.45	0.15	0.291	-	-	3	0
25	5.6	1.0	-	4.30	1.8	2.036	bd1	0.20	0.086	0.03	0.02	0.10	0.015	-	-	2	0
TOTAL PRECIP	22.7	7.8															
NO. OBS.	7	3	-	3	3	3	3	3	3	3	3	3	3	-	-		
A. MEAN	3.2	2.6	-	4.22	3.1	4.087	bd1	0.61	0.252	0.10	1.09	0.15	0.121	-	-		
STD. DEV.	3.5	1.5	-	4.45	2.7	2.587	bd1	0.36	0.338	0.06	1.24	0.05	0.149	-	-		
MINIMUM	0.4	1.0	-	4.00	1.3	2.036	bd1	0.20	0.028	0.03	0.02	0.10	0.015	-	-		
MAXIMUM	9.9	3.9	-	4.50	6.2	6.994	bd1	0.88	0.641	0.14	2.45	0.20	0.291	-	-		
P.W. MEAN			-	4.30	2.4	3.590	bd1	0.62	0.161	0.10	0.88	0.16	0.088				

PRECIP TYPE

T - TRACE AMOUNT

1 - RAIN

2 - SNOW

3 - MIXED

4 - UNCERTAIN

A. MEAN gl	3.1	4.087	0.1	0.61	0.252	0.10	1.09	0.15	0.121
P.W. MEAN gl	2.4	3.590	0.1	0.62	0.161	0.10	0.88	0.16	0.088

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN IN BRACKETS

LONG POINT
MARCH 1980

AIR CONCENTRATIONS (10^{-6} gm^{-3})

DAY	PARTICULATE					GAS				PARTICULATE			
	$\text{SO}_4^{=}$	NO_3^-	Cl^-	Na^+	NH_4^+	SO_2	Br	V	Al	Mn	Ca		
1	2.98	1.20	0.32	bd1	1.45	23.2	0.0243	0.00194	0.338	0.0076	2.26		
2	3.07	3.33	0.42	bd1	1.29	30.2	0.0216	0.00233	0.290	0.0080	1.03		
3	4.79	6.67	0.77	0.36	1.90	46.8	0.0229	0.00246	* 0.525	0.0286	0.70		
4	6.88	7.65	0.57	bd1	3.04	44.1	0.0252	0.00307	* 0.551	0.0253	0.79		
5	1.24	2.25	bd1	bd1	bd1	21.0	bd1	0.00147	* 0.113	bd1	bd1		
6	4.51	6.30	0.39	bd1	1.72	28.5	0.0183	0.00226	* 0.403	0.0218	0.40		
7	8.82	13.61	0.72	bd1	4.03	-	0.0288	0.00514	* 0.245	0.0180	bd1		
8	7.19	7.55	0.33	bd1	3.56	23.8	0.0151	0.00172	* 0.123	0.0071	0.39		
9	8.97	10.75	0.39	bd1	4.95	30.3	0.0248	0.00303	* 0.251	0.0116	bd1		
10	3.67	3.36	0.39	bd1	1.55	23.0	bd1	0.00283	* 1.215	0.0183	0.40		
11	2.22	1.01	0.29	bd1	bd1	6.5	bd1	0.00436	* 2.664	0.0321	1.38		
12	1.24	2.25	1.01	0.38	1.08	26.2	0.0115	0.00240	* 0.257	0.0107	0.98		
13	3.19	2.25	0.31	bd1	1.43	21.0	0.0139	0.00524	* 0.228	0.0096	bd1		
14	3.32	1.31	0.31	bd1	1.28	6.8	0.0106	0.00156	* 0.215	0.0049	0.56		
15	2.63	1.45	0.39	bd1	1.27	5.9	0.0117	0.00109	* 0.101	0.0054	0.44		
16	5.47	5.88	0.85	bd1	3.12	34.2	0.0299	0.00634	* 0.473	0.0163	1.18		
17	2.99	bd1	bd1	bd1	1.03	13.8	0.0102	0.00140	0.186	0.0065	0.35		
18	3.41	4.57	bd1	bd1	2.19	11.7	0.0121	0.00148	0.210	0.0174	bd1		
19	4.99	6.91	0.63	bd1	3.06	44.8	0.0211	0.00407	0.789	0.0602	0.69		
20	5.29	4.62	bd1	bd1	2.01	25.8	0.0179	0.00343	0.515	0.0397	0.61		
21	2.13	bd1	bd1	bd1	bd1	14.2	bd1	0.00108	0.128	bd1	bd1		
22	2.84	bd1	bd1	bd1	0.99	3.5	bd1	0.00062	0.080	bd1	bd1		
23	8.42	4.32	0.45	bd1	2.34	14.8	0.0199	0.00372	0.174	0.0073	0.80		
24	9.08	6.20	0.33	bd1	3.90	30.5	0.0281	0.00751	0.170	0.0141	0.36		
25	3.20	1.17	bd1	bd1	1.01	9.0	bd1	0.00056	bd1	bd1	bd1		
26	4.08	3.84	bd1	bd1	2.11	7.6	bd1	0.00101	0.084	bd1	0.99		
27	5.76	5.59	0.46	bd1	2.77	18.8	0.0184	0.00530	0.296	0.0244	0.74		
28	6.48	9.42	0.62	bd1	4.03	31.7	0.0241	0.01027	0.424	0.0224	1.28		
29	5.33	4.11	bd1	bd1	2.86	18.6	0.0134	0.00608	0.117	0.0135	bd1		
30	4.15	3.02	0.31	bd1	2.18	21.9	0.0106	0.00721	0.162	0.0068	0.34		
31	3.20	3.86	bd1	bd1	1.86	bd1	0.0140	0.00634	0.082	0.0161	0.38		

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	31	31	-	31	30	31	31	31	31	31		
A. MEAN	4.56	4.34	0.33	-	2.07	21.3	0.014	0.00346	0.368	0.0146	0.55		
S.D.	2.23	3.27	0.29	-	1.24	12.4	0.010	0.00239	0.491	0.0131	0.53		
MIN.	1.24	bd1	bd1	-	bd1	bd1	bd1	0.00056	bd1	bd1	bd1		
MAX.	9.08	13.61	1.01	-	4.95	48.8	0.030	0.01027	2.664	0.0602	2.26		

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10^{-2} g l^{-1})

														(10 ⁻³ g l ⁻¹)		ION BAL.		
DAY	AMOUNT		pH		SC ₄	NC ₃	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO +VE/-VE	PRECIP	COMMENT		
	STD (mm)	COLL (mm)	FIELD	LAB														
4	1.8	2.3	-	4.50	1.3	0.930	bd1	0.13	0.080	0.03	0.03	0.13	0.015	-	3	0		
6	3.0	2.6	-	5.70	6.6	-	2.1	-	-	-	-	-	-	-	2	0		
7	8.6	6.2	-	4.10	6.3	10.801	1.4	3.56	0.853	0.49	0.69	0.22	-	1.13	3	0		
11	0.8	1.3	-	4.20	3.0	4.294	0.2	0.66	0.269	0.11	0.16	0.17	0.017	0.96	2	0		
13	3.6	2.3	-	4.00	2.3	4.914	0.2	0.40	0.233	0.07	0.10	0.15	0.012	1.10	2	0		
17	13.0	11.1	-	4.00	15.2	-	1.3	-	-	-	-	-	-	-	3	0		
20	25.0	26.1	-	5.30	5.3	4.958	0.4	3.14	0.294	0.27	0.29	0.21	-	1.07	1	0		
21	14.0	13.0	-	4.20	3.0	1.771	bd1	0.44	0.153	0.06	0.11	0.18	0.014	-	1	0		
24	5.4	5.5	-	4.10	2.4	4.383	0.2	0.42	0.152	0.04	0.08	0.19	0.009	0.96	1	0		
28	3.3	3.3	-	3.90	4.5	7.304	0.3	0.92	0.146	0.16	0.09	0.19	0.011	0.92	1	0		
29	4.3	4.2	-	4.10	3.1	2.568	bd1	0.22	0.062	0.03	0.04	0.20	0.004	-	1	0		
30	9.3	8.1	-	4.00	2.8	3.497	bd1	0.22	0.350	0.04	0.10	0.21	0.009	-	1	0		
31	3.0	2.3	-	3.80	6.7	6.375	0.3	0.50	0.676	0.04	0.29	0.32	-	0.98	1	0		
TOTAL PRECIP	95.1	88.3																
NO. OBS.	13	13	-	13	13	11	13	11	11	11	11	11	8	7				
A. MEAN	7.3	6.8	-	4.12	4.8	4.709	0.5	0.96	0.297	0.12	0.20	0.20	0.011	1.02				
STD. DEV.	6.8	6.8	-	4.35	3.6	2.756	0.7	1.20	0.250	0.14	0.25	0.05	0.004	0.08				
MINIMUM	0.8	1.3	-	3.80	1.3	0.930	bd1	0.13	0.062	0.03	0.03	0.13	0.004	0.92				
MAXIMUM	25.0	26.1	-	5.70	15.2	10.801	2.1	3.56	0.853	0.49	0.89	0.32	0.017	1.13				
P.W. MEAN			-	4.20	5.8	4.739	0.5	1.61	0.315	0.17	0.25	0.20	0.011					

PRECIP TYPE

- 1 - RAIN
- 2 - SNOW
- 3 - MIXED
- 4 - UNCERTAIN

T - TRACE AMOUNT

A. MEAN al	4.8	4.709	0.5	0.96	0.297	0.12	0.20	0.20	0.011				
P.W. MEAN al	5.8	4.739	0.5	1.61	0.315	0.17	0.25	0.20	0.011				

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN IN BRACKETS

LONG POINT

APRIL 1980

AIR CONCENTRATIONS (10^{-6}gm^{-3})

DAY	PARTICULATE				GAS				PARTICULATE		
	SC_4	NO_3^-	Cl^-	Na^+	NH_4^+	SO_2	Br	V	Al	Mn	Ca
1	4.01	4.02	bd1	bd1	2.04	11.1	bd1	0.00713	0.116	0.0114	bd1
2	6.14	5.95	bd1	bd1	3.15	20.3	0.0120	0.00494	0.113	0.0103	bd1
3	5.60	4.79	0.35	bd1	2.75	19.9	0.0121	0.00443	0.192	0.0156	0.43
4	3.83	1.64	bd1	bd1	1.70	6.2	bd1	0.00122	0.054	bd1	bd1
5	2.19	2.95	0.29	bd1	1.78	5.2	0.0114	0.00212	0.178	0.0053	bd1
6	3.95	6.33	0.36	bd1	2.90	12.2	0.0159	0.00436	0.286	0.0086	0.69
7	4.15	2.48	bd1	bd1	1.70	29.9	0.0101	0.00212	0.450	0.0110	0.41
8	1.21	bd1	bd1	bd1	bd1	14.0	bd1	0.00094	0.069	bd1	bd1
9	3.36	2.21	bd1	bd1	1.62	22.1	bd1	0.00216	0.189	0.0103	bd1
10	5.96	4.02	bd1	bd1	2.36	10.5	bd1	0.00054	bd1	bd1	bd1
11	3.47	1.67	bd1	bd1	1.48	19.9	bd1	0.00180	0.173	0.0054	bd1
12	5.02	1.85	bd1	bd1	2.05	11.0	bd1	0.00123	0.093	bd1	bd1
13	2.80	2.30	bd1	bd1	1.93	9.7	bd1	0.00176	0.094	0.0065	0.35
14	3.90	3.89	bd1	bd1	1.63	20.4	bd1	0.00119	0.111	0.0060	0.38
15	2.54	1.30	bd1	bd1	1.23	24.4	bd1	0.00066	0.162	bd1	bd1
16	1.99	1.30	bd1	bd1	1.50	3.0	bd1	0.00063	0.182	bd1	0.97
17	3.39	5.07	bd1	bd1	2.29	18.5	0.0179	0.00298	0.344	0.0108	bd1
18	5.32	10.34	bd1	bd1	4.21	13.2	0.0266	0.00414	0.415	0.0239	1.09
19	10.29	12.12	bd1	bd1	5.41	28.1	0.0319	0.00570	0.671	0.0320	0.88
20	4.59	3.57	bd1	bd1	3.41	7.9	bd1	0.00093	0.233	bd1	1.00
21	1.68	2.28	bd1	bd1	2.04	7.9	bd1	0.00043	0.180	0.0061	0.75
22	2.90	3.28	0.31	bd1	2.63	12.2	0.0106	0.00445	0.411	0.0249	1.50
23	1.43	1.53	bd1	bd1	1.68	6.9	bd1	0.00270	0.654	0.0168	2.13
24	2.55	2.96	0.33	bd1	2.51	17.1	bd1	0.00306	0.298	0.0146	1.47
25	3.33	5.53	bd1	bd1	3.17	6.6	0.0117	0.00490	0.265	0.0091	0.89
26	2.06	3.15	bd1	bd1	2.63	19.3	bd1	0.00180	0.143	bd1	0.64
27	6.87	5.39	bd1	bd1	4.17	15.8	0.0144	0.00550	0.204	bd1	0.75
28	5.60	6.33	bd1	bd1	3.29	11.5	0.0176	0.00564	0.095	0.0157	bd1
29	3.49	2.25	* 1.55	bd1	1.32	13.0	bd1	0.00324	bd1	0.0182	bd1
30	4.40	2.03	* 0.71	bd1	1.76	6.4	bd1	0.00109	bd1	bd1	bd1

bd1 - BELOW DETECTION LIMIT

NO. OBS.	30	30	-	-	30	30	-	30	30	30	30
A. MEAN	3.93	3.75	-	-	2.34	14.1	-	0.00279	0.212	0.0087	0.48
S.D.	1.89	2.62	-	-	1.07	6.9	-	0.00189	0.170	0.0086	0.57
MIN.	1.21	bd1	-	-	bd1	3.0	-	0.00043	bd1	bd1	bd1
MAX.	10.29	12.12	-	-	5.41	29.9	-	0.00713	0.671	0.0320	2.13

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

 (10^{-5}g^{-1})

DAY	AMOUNT		FIELD	PH LAB	(10 g1)										ION BAL.			
	STD (mm)	COLL (mm)			SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO +VE/-VE	PRECIP TYPE	COMMENT		
4	14.2	11.1	-	3.90	6.1	4.958	0.1	0.42	1.227	0.07	0.18	0.22	0.026	1.12	1	0		
7	2.2	2.3	-	3.90	6.4	3.984	0.2	1.06	1.235	0.15	0.24	0.25	-	1.36	1	0		
8	10.4	11.1	-	4.40	1.3	0.974	0.1	0.12	0.983	0.03	0.12	0.20	0.010	2.54	1	0		
9	2.4	2.9	-	3.80	5.7	6.286	0.3	0.56	0.739	0.07	0.25	0.32	-	1.10	1	0		
10	1.0	1.0	-	3.80	5.4	5.356	0.3	-	0.381	-	-	-	-	-	1	0		
11	2.4	2.6	-	3.80	6.2	7.791	0.5	1.36	0.525	0.18	0.26	0.32	-	1.08	1	0		
12	2.4	2.6	-	4.00	6.6	5.711	0.4	0.32	0.381	0.05	0.45	0.57	-	0.73	1	0		
13	8.0	6.2	-	4.50	2.8	1.062	8.3	0.24	0.258	0.03	0.27	0.31	0.029	0.26	1	0		
14	28.1	24.1	-	4.20	2.3	1.195	0.1	0.16	0.180	0.02	0.15	0.26	0.010	1.36	1	0		
15	3.2	2.0	-	4.00	2.6	5.401	0.2	0.49	0.252	0.07	0.28	0.26	-	1.10	1	0		
19	1.4	1.3	-	4.00	8.5	13.059	0.8	-	1.700	-	-	-	-	-	1	0		
27	13.2	11.4	-	4.30	3.3	4.338	bd1	1.30	0.505	0.28	bd1	0.10	-	-	1	0		
28	7.1	7.2	-	5.10	3.4	3.099	0.1	0.35	1.661	0.07	0.40	0.30	0.325	1.21	1	0		
29	8.4	8.8	-	4.20	1.8	1.638	bd1	0.17	0.196	0.01	bd1	bd1	0.028	-	1	0		

TOTAL PRECIP 104.4 94.6

NO. OBS.	14	14	-	14	14	14	14	12	14	12	12	12	6	10
A. MEAN	7.5	6.8	-	4.04	4.5	4.632	0.8	0.55	0.730	0.09	0.22	0.26	0.071	1.19
STD. DEV.	7.4	6.3	-	4.30	2.2	3.233	2.2	0.44	0.537	0.08	0.14	0.14	0.125	0.58
MINIMUM	1.0	1.0	-	3.80	1.3	0.974	bd1	0.12	0.180	0.01	bd1	bd1	0.010	0.26
MAXIMUM	28.1	24.1	-	5.10	6.5	13.059	8.3	1.36	1.700	0.28	0.45	0.57	0.325	2.54
P.W. MEAN	-	-	-	4.15	3.4	2.996	0.7	0.43	0.624	0.08	0.16	0.22	0.046	-

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
- 2 - SNOW
- 3 - MIXED
- 4 - UNCERTAIN

A. MEAN d1	4.5	4.632	0.8	0.55	0.730	0.09	0.22	0.26	0.071
P.W. MEAN d1	3.4	2.996	0.8	0.43	0.624	0.08	0.17	0.23	0.046

DAY () - DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN IN BRACKETS

LONG POINT

MAY 1980

AIR CONCENTRATIONS (10^{-6}gm^{-3})

DAY	PARTICULATE					GAS		PARTICULATE				
	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	SO ₂	Br	V	Al	Mn	Ca	
1	4.73	5.88	bd1	bd1	3.69	4.2	0.0152	0.00273	0.111	bd1	1.07	
2	4.91	4.25	bd1	bd1	3.46	3.4	bd1	0.00278	0.210	0.0104	0.79	
3	5.41	6.94	bd1	bd1	4.78	15.2	0.0224	0.00450	0.552	0.0138	1.48	
4	6.66	2.61	bd1	bd1	3.29	13.8	bd1	0.00408	0.465	0.0077	0.75	
5	3.87	5.00	bd1	bd1	3.29	* 5.6	0.0171	0.00394	1.171	0.0295	2.31	
6	2.39	1.84	bd1	bd1	2.04	* 6.7	bd1	0.00285	0.355	bd1	0.55	
7	1.06	bd1	bd1	bd1	1.21	bd1	bd1	0.00101	0.315	0.0090	0.65	
8	1.31	1.64	bd1	bd1	1.65	* 3.7	bd1	0.00143	0.431	0.0066	1.30	
9	3.15	3.16	bd1	bd1	2.76	* 4.9	bd1	0.00216	0.548	0.0114	0.77	
10	6.60	5.12	bd1	bd1	3.66	* 24.9	0.0204	0.00412	0.966	0.0373	1.26	
11	6.71	6.57	bd1	bd1	5.18	* 7.7	0.0221	0.00315	0.690	0.0152	0.68	
12	1.59	3.88	bd1	bd1	1.59	13.8	0.0192	0.00683	0.537	0.0205	1.00	
13	2.72	2.12	bd1	bd1	1.53	7.6	bd1	0.00223	0.126	0.0087	bd1	
14	1.38	bd1	bd1	bd1	bd1	bd1	bd1	0.00045	0.087	bd1	0.46	
15	1.99	2.40	bd1	bd1	1.26	5.4	bd1	0.00246	0.215	0.0139	1.37	
16	2.00	1.55	bd1	bd1	bd1	11.1	bd1	0.00260	0.363	0.0124	0.88	
17	3.20	bd1	bd1	bd1	1.25	3.4	0.0189	0.00546	0.263	bd1	bd1	
18	2.54	bd1	bd1	bd1	bd1	3.7	bd1	0.00114	bd1	bd1	bd1	
19	3.53	2.34	bd1	bd1	1.44	bd1	* 0.0320	0.00219	0.143	bd1	1.13	
20	4.00	2.58	bd1	bd1	1.57	22.4	* 0.0288	0.00509	0.453	0.0220	1.37	
21	4.89	5.85	bd1	bd1	2.47	18.4	* 0.0352	0.01048	0.684	0.0317	1.56	
22	4.14	3.59	bd1	bd1	2.01	13.8	* 0.0466	0.00479	0.816	0.0263	1.17	
23	1.33	bd1	bd1	bd1	bd1	12.2	* 0.0222	0.00186	1.391	0.0124	1.09	
24	5.56	4.59	bd1	bd1	2.45	13.1	* 0.0397	0.00963	6.685	0.0811	5.06	
25	0.53	bd1	bd1	bd1	bd1	5.6	bd1	0.00136	0.656	0.0123	1.47	
26	1.07	1.89	bd1	bd1	bd1	-	-	-	-	-	-	
27	0.71	bd1	bd1	bd1	bd1	13.9	bd1	0.00241	0.852	0.0312	3.51	
28	2.56	bd1	bd1	bd1	bd1	13.3	bd1	0.00559	1.408	0.0220	3.16	
29	4.60	3.28	bd1	bd1	1.76	40.0	0.0303	0.00593	1.273	0.0508	4.03	
30	0.89	bd1	bd1	bd1	bd1	16.6	0.0165	0.00421	0.960	0.0274	1.45	
31	4.91	1.23	bd1	bd1	1.51	3.1	bd1	0.00043	0.088	bd1	bd1	

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	31	-	-	31	30	30	30	30	30	30
A. MEAN	3.26	2.53	-	-	1.74	10.3	0.013	0.00360	0.760	0.0171	1.34
S.D.	1.89	2.19	-	-	1.49	8.6	0.015	0.00242	1.188	0.0176	1.19
MIN.	0.53	bd1	-	-	bd1	bd1	bd1	0.00043	bd1	bd1	bd1
MAX.	6.71	6.94	-	-	5.18	40.0	0.047	0.01048	6.685	0.0811	5.06

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

 (10^{-5}g l^{-1})

DAY	AMOUNT		pH		ION BAL.										PRECIP	COMMENT
	STD (mm)	COLL (mm)	FIELD	LAB	$\text{SO}_4^{=}$	NO_3^{-}	Cl^{-}	Ca^{++}	NH_4^{+}	Mg^{++}	Na^{+}	K^{+}	TOT P	RATIO +VE/-VE		
6	1.4	1.6	-	7.30	9.1	-	1.0	9.40	-	1.60	-	-	0.143	-	1	0
10	4.4	4.2	-	4.30	5.3	4.471	0.3	2.20	0.586	0.29	bd1	0.14	0.043	-	1	0
11	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0
12	9.3	9.8	-	4.40	2.4	2.302	0.1	0.66	0.313	0.08	0.30	0.06	0.051	1.22	1	0
13	4.0	3.9	-	4.10	3.9	3.940	0.3	0.37	0.952	0.05	bd1	0.15	-	-	1	0
17	29.0	28.3	-	4.10	3.2	3.010	bd1	0.21	0.786	0.02	bd1	0.05	0.009	-	1	0
30	8.2	6.2	-	4.10	7.7	3.719	0.2	1.50	1.017	0.27	bd1	0.15	0.090	-	1	0
TOTAL PRECIP	56.7	54.0														
NO. OBS.	7	6	-	6	6	5	6	6	5	6	5	5	5	1		
A. MEAN	8.1	9.0	-	4.26	5.3	3.488	0.3	2.39	0.731	0.39	0.06	0.11	0.067	1.22		
STD. DEV.	9.8	9.8	-	4.50	2.6	0.845	0.4	3.52	0.287	0.61	0.13	0.05	0.051	-		
MINIMUM	0.4	1.6	-	4.10	2.4	2.302	bd1	0.21	0.313	0.02	bd1	0.05	0.009	1.22		
MAXIMUM	29.0	28.3	-	7.30	9.1	4.471	1.0	9.40	1.017	1.60	0.30	0.15	0.143	1.22		
P.W. MEAN			-	4.16	4.1	3.181	0.1	0.87	0.737	0.13	0.05	0.08	0.036			

PRECIP TYPE
 1 - RAIN
 2 - SNOW
 3 - MIXED
 4 - UNCERTAIN

T - TRACE AMOUNT

A. MEAN d1	5.3	3.488	0.3	2.39	0.731	0.39	0.08	0.11	0.067
P.W. MEAN d1	4.1	3.181	0.1	0.87	0.737	0.13	0.07	0.08	0.036

DAY() - DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN IN BRACKETS

LONG POINT

JUNE 1980

AIR CONCENTRATIONS (10^{-6}gm^{-3})

PARTICULATE

GAS

PARTICULATE

DAY	SO ₄ ⁻	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	SO ₂	Br	V	Al	Mn	Ca
1	3.23	1.36	bd1	bd1	1.27	8.4	0.0129	0.00361	0.520	0.0167	0.72
2	4.43	2.82	bd1 *	1.03	2.14	7.8	-	-	-	-	-
3	1.39	bd1	bd1 *	0.37	bd1	-	bd1	0.00047	0.234	0.0078	1.19
4	1.82	1.76	bd1	bd1	0.93	16.0	0.0118	0.00390	0.332	0.0161	0.49
5	5.42	1.79	bd1	bd1	2.05	8.4	0.0094	0.00664	0.251	0.0095	bd1
6	4.13	1.55	bd1	bd1	1.58	7.1	0.0153	0.00236	0.201	0.0068	bd1
7	bd1	bd1	bd1	bd1	bd1	-	bd1	bd1	bd1	bd1	bd1
8	bd1	bd1	bd1	bd1	bd1	-	bd1	bd1	bd1	bd1	bd1
9	1.14	1.68	bd1	bd1	bd1	2.0	bd1	0.00087	0.264	0.0068	0.76
10	bd1	bd1	0.39	bd1	bd1	bd1	bd1	bd1	bd1	bd1	0.52
11	3.72	4.22	bd1	bd1	1.79	22.6	0.0277	0.00729	0.713	0.0226	1.20
12	9.08	2.14	0.30	bd1	2.01	-	0.0331	0.00865	1.600	0.0786	1.12
13	9.06	3.68	bd1	bd1	2.99	15.1	0.0254	0.00483	0.652	0.0299	0.42
14	5.83	2.06	bd1	bd1	2.14	8.2	0.0118	0.00201	0.184	0.0119	bd1
15	0.33	bd1	bd1	bd1	bd1	1.7	bd1	0.00023	bd1	bd1	bd1
16	1.86	1.79	bd1	bd1	bd1	7.1	bd1	0.00122	0.296	0.0113	1.63
17	2.73	1.05	bd1	bd1	0.70	22.8	bd1	0.00188	0.293	0.0090	0.47
18	5.52	6.45	bd1	bd1	2.67	18.7	0.0228	0.00438	0.494	0.0250	1.03
19	3.62	2.87	bd1	bd1	1.45	8.6	0.0147	0.00396	0.444	0.0174	2.00
20	0.40	bd1	bd1	bd1	bd1	3.7	bd1	0.00042	0.319	0.0071	0.25
21	1.99	1.79	bd1	bd1	1.05	7.4	0.0058	0.00360	0.234	0.0054	0.55
22	4.55	1.99	bd1	bd1	1.65	18.5	0.0175	0.00281	0.387	0.0154	0.27
23	13.78	bd1	bd1	bd1	3.05	-	0.0224	0.00765	1.432	0.0217	0.76
24	13.73	1.94	bd1	bd1	3.74	30.0	0.0251	0.00561	1.160	0.0353	0.71
25	9.58	1.43	bd1	bd1	2.16	24.5	0.0117	0.00456	0.648	0.0169	0.57
26	7.36	2.84	bd1	bd1	2.72	7.7	0.0145	0.00205	0.432	0.0168	0.50
27	3.93	1.99	bd1	bd1	1.44	12.5	0.0220	0.00242	0.554	0.0152	2.06
28	2.58	2.20	bd1	bd1	1.36	-	0.0215	0.00453	0.172	0.0097	0.28
29	1.03	0.71	bd1	bd1	bd1	5.2	bd1	0.00051	0.099	bd1	bd1
30	3.48	1.38	bd1	bd1	1.70	1.9	bd1	0.00143	0.273	0.0054	0.49

bd1 - BELOW DETECTION LIMIT

NO. OBS.	30	30	-	-	30	24	29	29	29	29	29
A. MEAN	4.19	1.72	-	-	1.35	11.1	0.011	0.00303	0.420	0.0144	0.61
S.D.	3.75	1.43	-	-	1.10	8.1	0.011	0.00248	0.394	0.0153	0.58
MIN.	bd1	bd1	-	-	bd1	bd1	bd1	bd1	bd1	bd1	bd1
MAX.	13.78	6.45	-	-	3.74	30.0	0.033	0.00865	1.600	0.0786	2.06

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10^{-5}g^{-1})ION BAL.
RATIO PRECIP

DAY	AMOUNT STD (mm)	COLL (mm)	PH FIELD LAB	SO ₄ ⁻	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	+VE/-VE	PRECIP TYPE	COMMENT
1	5.4	5.9	-	4.10	4.5	2.213	0.1	0.51	0.408	0.06	bd1	0.15	0.032	-	1 0
2	10.4	10.7	-	4.30	2.0	5.002	bd1	0.31	1.006	0.02	bd1	0.10	0.018	-	1 0
6	1.3	1.3	-	-	-	-	-	-	-	-	-	-	-	-	1 0
7	19.4	19.5	-	4.10	3.9	1.859	0.2	0.46	0.382	0.05	0.20	0.10	0.013	1.20	1 0
9	7.0	6.5	-	4.40	1.7	2.568	bd1	0.22	0.652	0.02	bd1	0.05	0.008	-	1 0
15	11.0	9.4	-	4.00	4.8	3.054	0.1	0.57	0.778	0.07	bd1	0.11	0.008	-	1 0
19	17.3	14.3	-	4.10	5.2	3.453	0.1	0.53	0.984	0.08	0.09	0.09	0.027	1.04	1 0
28	10.3	9.4	-	3.90	7.8	4.471	0.2	0.75	1.146	0.11	0.05	0.08	0.010	1.00	1 0
TOTAL PRECIP	82.1	77.0													
NO. OBS.	8	8	-	7	7	7	7	7	7	7	7	7	7	3	
A. MEAN	10.3	9.6	-	4.10	4.3	3.231	0.1	0.48	0.765	0.06	0.05	0.10	0.017	1.08	
STD. DEV.	6.0	5.5	-	4.54	2.1	1.163	0.1	0.17	0.300	0.03	0.08	0.03	0.010	0.11	
MINIMUM	1.3	1.3	-	3.90	1.7	1.859	bd1	0.22	0.382	0.02	bd1	0.05	0.008	1.00	
MAXIMUM	19.4	19.5	-	4.40	7.8	5.002	0.2	0.75	1.146	0.11	0.20	0.15	0.032	1.20	
P.W. MEAN			-	4.09	4.4	3.186	0.1	0.49	0.768	0.06	0.07	0.10	0.016		

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
- 2 - SNOW
- 3 - MIXED
- 4 - UNCERTAIN

A. MEAN dl	4.3	3.231	0.1	0.48	0.765	0.06	0.06	0.10	0.017
P.W. MEAN dl	4.4	3.186	0.1	0.49	0.768	0.06	0.08	0.10	0.016

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN IN BRACKETS

APPENDIX 4

MONTHLY SUMMARIES OF MEASURED CONCENTRATIONS IN AIR AT TORONTO CN-TOWER

TORONTO

JULY 1979

DAY	AIR CONCENTRATIONS (10^{-6} gm^{-3})					GAS
	PARTICULATE					
	$\text{SO}_4^{=}$	NO_3^{-}	Cl^{-}	Na^{+}	NH_4^{+}	SO_2
1	8.34	3.22	bd1	0.15	3.20	18.6
2	2.51	3.23	0.32	0.08	2.65	3.5
3	1.33	2.63	0.53	bd1	1.74	7.6
4	0.97	2.23	0.52	bd1	2.04	7.3
5	0.72	1.26	0.39	bd1	1.56	2.7
6	1.93	1.67	0.45	bd1	1.96	11.6
7	4.00	3.19	0.34	bd1	3.14	16.7
8	8.99	4.69	0.34	bd1	4.33	21.5
9	16.49	1.81	bd1	bd1	4.21	35.9
10	19.09	1.94	0.24	bd1	4.81	27.5
11	24.25	6.07	0.44	bd1	6.96	35.5
12	24.86	8.52	0.60	bd1	7.43	114.7
13	16.66	4.25	0.32	bd1	5.55	21.2
14	44.05	2.04	0.29	bd1	6.94	65.8
15	22.48	3.13	0.32	bd1	5.46	23.5
16	2.32	4.89	0.41	bd1	3.64	3.4
17	0.57	3.40	0.47	bd1	2.17	3.0
18	1.12	3.96	0.29	bd1	2.23	7.3
19	4.76	4.23	0.34	bd1	3.40	30.4
20	14.01	4.79	0.25	bd1	5.12	46.5
21	22.98	3.38	bd1	bd1	5.84	36.1
22	22.33	4.39	bd1	bd1	6.42	21.7
23	37.50	0.96	bd1	0.08	5.43	76.0
24	16.56	3.64	bd1	bd1	5.02	66.5
25	9.01	3.86	0.29	bd1	3.78	70.0
26	7.08	2.17	bd1	bd1	2.59	2.8
27	17.96	6.29	0.67	bd1	6.70	52.4
28	3.54	5.14	0.32	bd1	3.25	13.0
29	13.47	4.08	0.32	bd1	5.07	34.8
30	17.16	5.34	0.71	bd1	6.23	44.2
31	-	-	-	-	-	-

bd1 - BELOW DETECTION LIMIT

NO. OBS.	30	30	30	-	30	30
A. MEAN	12.90	3.69	0.31	-	4.25	30.6
S.D.	11.18	1.64	0.21	-	1.80	27.0
MIN.	0.57	0.96	bd1	-	1.56	2.7
MAX.	44.05	8.52	0.71	-	7.43	114.7

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

TORONTO

AUGUST 1979

DAY	AIR CONCENTRATIONS (10^{-6} gm^{-3})					GAS SO_2
	$\text{SO}_4^{=}$	NO_3^{-}	Cl^{-}	Na^{+}	NH_4^{+}	
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-
5	-	-	-	-	-	-
6	-	-	-	-	-	-
7	-	-	-	-	-	-
8	-	-	-	-	-	-
9	-	-	-	-	-	-
10	-	-	-	-	-	-
11	-	-	-	-	-	-
12	-	-	-	-	-	-
13	-	-	-	-	-	-
14	-	-	-	-	-	-
15	-	-	-	-	-	-
16	-	-	-	-	-	-
17	8.36	2.85	bd1	bd1	3.25	24.8
18	18.27	2.39	bd1	bd1	4.94	67.0
19	12.66	1.49	bd1	bd1	3.29	22.8
20	4.25	2.85	0.33	bd1	2.56	26.4
21	4.43	4.72	0.27	bd1	3.34	31.7
22	8.40	1.71	bd1	bd1	3.13	135.4
23	20.81	1.37	bd1	bd1	4.87	44.5
24	16.51	2.05	bd1	bd1	4.36	47.1
25	4.69	4.00	0.35	bd1	3.36	5.4
26	7.34	2.62	0.30	bd1	3.23	143.6
27	11.41	3.15	bd1	bd1	4.05	47.2
28	21.14	0.76	bd1	bd1	4.17	49.2
29	14.56	4.19	0.29	bd1	5.47	22.5
30	5.70	5.27	0.46	bd1	3.63	61.6
31	6.42	4.56	0.43	bd1	3.74	30.1

bd1 - BELOW DETECTION LIMIT

NO. OBS.	-	-	-	-	-	-
A. MEAN	-	-	-	-	-	-
S.D.	-	-	-	-	-	-
MIN.	-	-	-	-	-	-
MAX.	-	-	-	-	-	-

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

TOFONOIO
SEPTEMBER 1979

DAY	AIR CONCENTRATIONS (10^{-6} gm^{-3})					GAS SO ₂
	SO ₄ ⁼	NO ₃ ⁻	CL ⁻	Na ⁺	NH ₄ ⁺	
1	21.90	2.25	bd1	bd1	5.27	21.5
2	16.85	3.18	0.36	bd1	5.30	25.5
3	2.68	3.46	0.35	bd1	2.56	3.0
4	3.62	3.75	0.38	bd1	2.56	55.0
5	15.96	2.56	0.30	bd1	4.27	72.1
6	12.26	3.85	0.36	bd1	4.52	22.4
7	2.30	2.05	0.50	0.09	1.81	6.4
8	1.57	1.79	0.45	bd1	1.66	7.9
9	7.08	2.86	0.39	0.13	3.47	21.1
10	5.34	2.79	0.39	bd1	3.08	28.6
11	1.30	4.34	0.36	bd1	2.12	12.5
12	10.97	3.93	0.30	bd1	4.21	69.5
13	23.85	1.35	bd1	bd1	4.81	35.0
14	2.53	1.73	bd1	bd1	1.64	7.0
15	1.76	2.50	0.37	bd1	1.83	4.1
16	5.13	4.14	0.42	bd1	3.23	15.3
17	9.93	3.03	0.39	bd1	3.85	92.1
18	10.19	5.04	0.66	bd1	4.52	44.2
19	0.78	2.08	0.55	bd1	1.49	14.6
20	6.99	3.68	0.58	bd1	3.89	99.8
21	4.83	4.34	0.51	bd1	3.64	46.4
22	0.92	2.09	0.35	bd1	1.73	7.9
23	1.35	1.65	0.44	bd1	1.62	25.8
24	5.22	3.72	0.41	bd1	3.07	76.7
25	7.98	5.63	0.46	bd1	4.33	75.8
26	2.12	4.35	0.46	bd1	2.49	43.4
27	9.61	3.76	0.38	bd1	4.29	228.9
28	12.74	2.52	bd1	bd1	3.84	59.8
29	21.83	3.47	bd1	bd1	4.57	74.6
30	18.22	4.08	0.29	bd1	4.56	59.8

bd1 - BELOW DETECTION LIMIT

NO. OBS.	30	30	30	-	30	30
A. MEAN	8.26	3.20	0.35	-	3.35	45.5
S.D.	6.93	1.07	0.18	-	1.23	44.8
MIN.	0.78	1.35	bd1	-	1.49	3.0
MAX.	23.85	5.63	0.66	-	5.30	228.9

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

TOFONOIO
OCTOBER 1979

DAY	AIR CONCENTRATIONS (10^{-6} gm^{-3})					GAS SO ₂
	SO ₄ ⁼	NO ₃ ⁻	CL ⁻	Na ⁺	NH ₄ ⁺	
1	9.59	4.01	0.33	bd1	3.95	58.6
2	12.14	1.93	0.27	bd1	3.69	64.4
3	9.29	3.04	0.37	bd1	4.71	24.5
4	4.23	2.38	0.54	bd1	2.86	73.6
5	3.50	5.46	0.76	bd1	3.47	27.6
6	4.23	4.52	0.38	0.53	3.30	35.2
7	0.80	1.81	bd1	bd1	1.55	9.2
8	1.16	2.24	0.43	bd1	1.75	24.0
9	1.26	1.51	0.26	bd1	1.41	22.1
10	1.82	2.09	0.34	0.23	1.77	15.6
11	4.11	3.05	bd1	bd1	2.69	39.3
12	2.63	3.08	0.53	bd1	2.79	72.9
13	1.61	1.62	0.38	0.46	1.68	26.0
14	1.13	2.61	0.46	0.12	2.11	13.6
15	3.14	4.17	0.58	bd1	3.13	16.2
16	3.91	2.38	0.38	bd1	2.56	144.7
17	9.73	4.72	0.34	0.18	4.25	62.9
18	5.64	1.95	bd1	bd1	2.27	26.0
19	8.65	3.63	0.28	bd1	5.56	41.8
20	9.45	5.12	0.43	bd1	4.94	-
21	7.28	4.66	0.67	bd1	4.95	78.1
22	7.66	5.03	0.39	0.21	3.85	-
23	1.85	3.00	0.50	bd1	2.57	61.2
24	0.73	1.21	0.39	bd1	1.67	9.6
25	1.86	1.48	0.58	bd1	1.42	16.8
26	1.19	1.16	0.58	bd1	1.01	15.2
27	5.35	3.15	0.36	bd1	2.58	40.9
28	4.60	3.59	0.41	bd1	2.55	19.5
29	4.32	2.20	0.56	0.09	2.02	17.1
30	5.37	1.86	0.34	bd1	1.74	73.4
31	16.85	4.20	0.32	bd1	4.18	-

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	31	31	-	31	28
A. MEAN	5.00	2.99	0.39	-	2.87	40.4
S.D.	3.87	1.27	0.18	-	1.22	30.4
MIN.	0.73	1.16	bd1	-	1.01	5.2
MAX.	16.85	5.46	0.76	-	5.56	144.7

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

TORONTO

NOVEMBER 1979

DAY	AIR CONCENTRATIONS (10^{-6} gm^{-3})					GAS
	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	SO ₂
1	4.00	3.04	0.42	bd1	2.05	129.6
2	3.54	5.40	0.42	bd1	2.59	57.3
3	2.14	5.14	0.45	0.07	2.28	-
4	2.30	3.10	0.23	bd1	1.82	27.0
5	7.37	5.61	0.40	0.07	3.35	32.5
6	9.89	6.01	0.58	0.11	4.18	45.0
7	4.88	2.40	0.33	bd1	2.41	35.4
8	4.25	3.01	0.44	bd1	2.29	54.5
9	3.87	3.15	bd1	bd1	2.34	42.6
10	1.92	2.75	0.30	bd1	1.88	13.2
11	1.87	2.94	0.48	bd1	2.00	14.5
12	3.35	2.31	0.26	bd1	1.85	69.4
13	4.76	3.73	0.32	bd1	2.53	60.4
14	-	-	-	-	-	-
15	-	-	-	-	-	-
16	2.64	5.07	0.47	bd1	2.49	60.3
17	9.83	22.16	0.70	0.10	6.58	38.5
18	9.85	14.34	0.37	bd1	5.78	42.2
19	15.85	8.15	0.32	0.26	5.13	138.7
20	5.02	7.82	0.40	bd1	3.65	11.3
21	5.33	3.80	0.39	bd1	3.12	36.5
22	4.65	2.46	0.34	bd1	2.64	50.9
23	5.08	3.48	0.34	bd1	2.81	51.2
24	3.68	3.29	bd1	bd1	2.35	41.2
25	2.78	2.11	0.32	bd1	1.66	51.2
26	3.19	3.38	0.46	bd1	2.14	67.1
27	4.01	4.95	0.47	bd1	2.79	118.7
28	2.73	3.40	0.36	bd1	2.23	12.1
29	2.38	3.03	0.36	bd1	2.05	16.5
30	2.90	2.96	0.35	bd1	2.03	22.2

bd1 - BELOW DETECTION LIMIT

NO. OBS.	28	28	28	-	28	27
A. MEAN	4.79	4.96	0.37	-	2.84	50.5
S.D.	3.15	4.20	0.14	-	1.22	33.8
MIN.	1.87	2.11	bd1	-	1.82	11.3
MAX.	15.85	22.16	0.70	-	6.58	138.7

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

TORONTO

DECEMBER 1979

DAY	AIR CONCENTRATIONS (10^{-6} gm^{-3})					GAS
	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	SO ₂
1	3.45	2.25	0.25	bd1	1.88	33.0
2	2.43	1.78	0.34	bd1	1.11	20.7
3	3.09	4.21	0.46	bd1	2.32	34.7
4	2.70	5.28	0.57	bd1	2.76	32.5
5	4.20	5.67	0.32	bd1	3.00	80.3
6	3.54	6.56	0.75	bd1	3.20	40.5
7	2.14	2.40	0.55	bd1	1.79	45.7
8	0.78	1.77	0.46	bd1	1.17	6.3
9	2.33	3.38	0.53	bd1	2.18	29.8
10	1.14	1.21	bd1	bd1	3.17	55.2
11	1.00	0.85	bd1	0.08	2.81	65.4
12	0.34	bd1	bd1	bd1	1.05	13.3
13	0.66	0.50	bd1	0.07	2.04	36.5
14	1.94	2.49	0.53	bd1	1.74	22.6
15	bd1	bd1	bd1	bd1	0.32	0.4
16	1.95	2.24	0.50	bd1	1.75	38.0
17	1.37	1.83	0.50	bd1	1.46	16.3
18	2.54	1.60	0.62	0.21	1.57	37.0
19	1.81	1.23	0.23	bd1	1.16	26.1
20	5.86	2.19	bd1	bd1	2.15	45.2
21	7.78	2.92	bd1	0.15	2.76	51.9
22	4.77	1.57	0.27	bd1	2.27	77.4
23	2.83	1.56	0.25	bd1	1.65	46.0
24	0.74	0.97	0.37	bd1	0.96	39.2
25	2.15	1.08	0.30	bd1	1.07	5.8
26	2.94	1.29	0.28	bd1	1.32	7.6
27	1.25	1.30	0.24	bd1	0.97	3.6
28	1.28	1.81	0.36	bd1	1.28	5.2
29	0.95	2.87	0.42	bd1	1.50	3.8
30	2.05	1.37	0.44	bd1	1.31	0.8
31	4.74	3.68	0.96	bd1	3.09	35.5

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	31	31	-	31	31
A. MEAN	2.41	2.19	0.35	-	1.83	30.6
S.D.	1.71	1.55	0.25	-	0.76	21.9
MIN.	bd1	bd1	bd1	-	0.32	0.4
MAX.	7.78	6.56	0.96	-	3.20	80.3

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

TORONTO
JANUARY 1980

DAY	AIR CONCENTRATIONS (10^{-6} gm^{-3})					GAS
	PARTICULATE					
	$\text{SO}_4^{=}$	NO_3^-	Cl^-	Na^+	NH_4^+	SO_2
1	6.94	4.41	0.39	bd1	3.35	33.5
2	2.72	1.73	0.62	bd1	1.81	19.6
3	2.80	1.55	0.64	0.30	1.38	46.6
4	2.10	1.43	0.58	0.16	1.18	67.4
5	1.25	0.97	0.67	0.20	1.00	33.0
6	3.54	1.86	0.28	bd1	1.77	44.1
7	3.41	2.42	0.43	bd1	2.02	47.5
8	3.11	2.21	0.37	bd1	1.94	25.8
9	1.68	0.99	0.33	bd1	1.19	16.6
10	4.52	1.98	0.67	0.69	2.21	52.3
11	2.22	1.79	0.60	0.11	1.55	13.5
12	1.56	1.39	0.53	bd1	1.17	24.2
13	2.67	2.45	0.35	bd1	1.68	42.9
14	5.51	4.13	0.34	bd1	2.85	38.6
15	4.27	2.25	0.25	0.16	1.99	174.4
16	4.53	3.09	0.39	0.27	1.99	278.4
17	4.47	4.09	0.66	bd1	3.08	87.3
18	3.93	3.52	0.30	bd1	2.17	48.4
19	2.37	1.54	0.35	bd1	1.40	4.6
20	1.25	1.39	0.61	bd1	1.21	7.4
21	2.70	5.17	1.05	bd1	2.74	84.3
22	3.94	3.77	0.86	bd1	2.61	104.3
23	1.05	0.86	0.92	0.21	0.81	6.9
24	2.53	1.74	1.39	0.52	1.47	15.6
25	4.17	4.40	0.77	0.17	2.78	24.0
26	1.88	1.50	0.74	0.08	1.57	14.6
27	3.43	3.61	0.60	bd1	2.41	28.4
28	4.22	3.87	1.03	0.31	2.44	18.0
29	3.12	3.05	0.88	0.27	1.45	32.7
30	1.95	0.69	1.03	0.34	0.93	15.4
31	1.53	0.76	1.10	0.38	1.02	15.1

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	31	31	-	31	31
A. MEAN	3.08	2.41	0.65	-	1.85	47.2
S.D.	1.37	1.27	0.29	-	0.68	55.4
MIN.	1.05	0.69	0.25	-	0.81	4.6
MAX.	6.94	5.17	1.39	-	3.35	278.4

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

TORONTO
FEBRUARY 1980

AIR CONCENTRATIONS (10^{-6} gm^{-3})						GAS
PARTICULATE						
DAY	$\text{SO}_4^{=}$	NO_3^-	Cl^-	Na^+	NH_4^+	SO_2
1	0.98	bd1	0.43	bd1	0.62	7.2
2	2.21	0.65	0.46	0.12	1.11	27.2
3	1.71	0.47	0.56	0.10	1.07	20.6
4	1.33	0.66	1.10	0.47	0.95	20.6
5	3.74	1.57	1.91	0.99	1.54	32.6
6	1.72	1.68	0.63	bd1	1.47	25.3
7	0.99	1.32	1.26	0.53	1.08	-
8	1.95	0.87	1.02	0.31	1.04	24.8
9	1.78	0.74	0.86	0.34	1.01	20.1
10	5.25	1.85	0.66	0.16	2.13	50.2
11	7.01	2.65	0.34	bd1	2.94	47.1
12	6.14	4.25	0.66	0.11	3.35	19.4
13	8.87	5.03	0.52	bd1	3.72	37.7
14	1.95	1.18	0.67	0.16	1.12	14.5
15	3.82	1.61	0.41	0.12	1.57	27.4
16	3.80	bd1	0.59	0.20	1.31	37.2
17	0.63	0.54	0.70	0.16	2.34	35.4
18	1.03	0.52	0.78	0.32	2.64	55.0
19	0.75	1.00	0.93	0.08	2.75	39.3
20	8.70	6.94	0.38	0.13	4.16	63.4
21	5.82	2.31	0.91	0.33	2.20	44.5
22	2.61	1.91	0.50	bd1	1.44	176.7
23	5.91	2.83	0.44	0.12	2.37	78.8
24	4.64	3.14	0.64	bd1	2.66	12.6
25	2.15	1.18	0.87	0.26	1.14	11.7
26	2.51	2.01	0.83	0.21	1.62	27.2
27	2.48	1.64	0.85	0.27	1.31	21.6
28	2.25	bd1	1.08	0.43	0.76	28.3
29	2.13	bd1	0.66	0.15	0.77	26.8

bd1 - BELOW DETECTION LIMIT

NO. OBS.	29	29	29	29	29	28
A. MEAN	3.27	1.67	0.75	0.21	1.80	36.9
S.D.	2.33	1.59	0.33	0.21	0.94	31.8
MIN.	0.63	bd1	0.34	bd1	0.62	7.2
MAX.	8.87	6.94	1.91	0.99	4.16	176.7

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

TORONTO
MARCH 1980

DAY	AIR CONCENTRATIONS (10^{-6} gm^{-3})					GAS
	PARTICULATE					
	$\text{SO}_4^{=}$	NO_3^-	Cl^-	Na^+	NH_4^+	SO_2
1	2.72	bd1	0.56	0.10	0.53	45.4
2	2.66	2.27	0.54	bd1	1.59	21.6
3	4.41	4.66	0.71	bd1	2.70	35.5
4	6.56	5.04	0.64	bd1	3.40	84.5
5	4.29	1.93	0.49	bd1	2.15	41.3
6	4.34	4.49	0.60	bd1	2.80	47.6
7	8.10	6.32	0.76	bd1	4.08	130.9
8	6.91	2.15	0.52	bd1	2.66	34.9
9	8.34	4.31	0.46	bd1	3.70	57.6
10	5.73	3.32	0.65	bd1	2.96	39.2
11	1.42	0.89	0.65	bd1	1.12	10.6
12	1.72	1.12	0.94	0.18	1.33	45.6
13	1.69	1.01	0.49	bd1	1.34	27.7
14	3.04	1.17	0.47	bd1	1.66	10.9
15	1.97	0.93	0.50	bd1	1.31	17.4
16	4.47	2.33	0.53	bd1	2.25	67.5
17	3.14	1.76	0.72	bd1	2.12	30.8
18	3.85	5.35	0.86	bd1	3.20	37.6
19	4.59	4.58	0.77	bd1	3.11	115.5
20	6.37	3.59	0.38	bd1	3.40	54.7
21	1.92	0.94	0.42	bd1	1.37	18.3
22	3.52	0.84	0.46	bd1	1.31	21.0
23	11.69	2.20	0.36	bd1	2.78	122.7
24	6.32	1.98	0.37	bd1	2.10	260.4
25	4.67	1.29	bd1	bd1	1.64	33.7
26	3.04	1.97	0.45	bd1	1.92	30.7
27	4.95	1.67	0.38	bd1	1.81	62.0
28	4.64	3.47	0.52	bd1	2.79	15.8
29	5.35	2.17	0.50	bd1	2.67	9.6
30	3.25	1.62	0.49	bd1	2.09	8.5
31	2.92	1.46	0.55	bd1	1.60	45.2

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	31	31	-	31	31
A. MEAN	4.47	2.48	0.54	-	2.24	52.4
S.D.	2.27	1.60	0.18	-	0.86	50.5
MIN.	1.42	bd1	bd1	-	0.53	8.5
MAX.	11.69	6.32	0.94	-	4.08	260.4

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

TORONTO
APRIL 1980

DAY	AIR CONCENTRATIONS (10^{-6} gm^{-3})					GAS SO ₂
	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	
1	5.82	4.25	1.10	bd1	3.60	80.6
2	3.49	3.53	1.61	bd1	3.15	16.5
3	3.39	1.52	0.70	bd1	2.17	76.3
4	2.44	1.24	0.57	bd1	1.83	32.6
5	1.73	1.64	0.73	bd1	1.83	35.2
6	2.47	1.83	0.76	bd1	1.97	17.4
7	6.73	2.19	0.46	bd1	3.09	40.7
8	5.64	2.45	0.56	bd1	2.81	47.4
9	4.75	2.34	bd1	bd1	2.63	35.4
10	4.41	2.35	0.28	bd1	2.71	32.3
11	9.13	3.27	0.31	bd1	3.83	47.5
12	4.47	1.99	0.48	bd1	2.45	24.2
13	1.75	1.38	0.33	bd1	1.41	5.2
14	2.93	1.46	0.47	bd1	1.57	57.5
15	2.31	0.98	0.39	bd1	1.60	21.6
16	2.46	1.19	0.31	bd1	1.19	14.5
17	3.75	7.52	0.49	bd1	3.45	45.9
18	3.80	3.86	0.49	bd1	2.83	40.2
19	9.01	4.64	0.36	bd1	4.36	39.5
20	2.23	1.67	0.53	bd1	2.08	8.6
21	1.49	1.39	0.60	bd1	1.56	10.1
22	2.33	1.00	0.40	bd1	1.34	19.6
23	1.69	2.15	0.67	bd1	1.85	16.0
24	3.34	2.70	0.77	bd1	2.70	62.8
25	4.97	1.54	0.40	bd1	2.69	21.0
26	6.67	3.26	0.39	bd1	3.32	64.1
27	6.39	1.86	0.41	bd1	3.24	23.7
28	1.02	0.56	0.32	bd1	1.29	48.8
29	2.24	2.37	0.46	bd1	1.86	39.1
30	5.35	5.06	0.63	bd1	3.31	13.4

bd1 - BELOW DETECTION LIMIT

NO. OBS.	30	30	30	-	30	30
A. MEAN	3.94	2.45	0.53	-	2.46	35.9
S.D.	2.14	1.47	0.29	-	0.85	22.7
MIN.	1.02	0.56	bd1	-	1.19	5.2
MAX.	9.13	7.52	1.61	-	4.36	97.5

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

TORONTO

MAY 1980

AIR CONCENTRATIONS (10^{-6} gm^{-3})						GAS
PARTICULATE						
DAY	$\text{SO}_4^{=}$	NO_3^-	Cl^-	Na^+	NH_4^+	SO_2
1	3.28	3.93	0.40	bd1	2.45	15.6
2	5.10	3.95	0.37	bd1	2.59	16.9
3	1.31	2.63	0.73	bd1	1.91	5.6
4	1.74	2.73	0.99	bd1	2.29	9.5
5	2.95	3.49	1.06	bd1	2.90	6.3
6	2.40	2.38	0.89	bd1	2.41	24.5
7	1.28	1.03	0.28	bd1	1.56	5.4
8	0.86	0.76	0.25	bd1	1.30	7.7
9	1.39	1.49	0.25	bd1	1.67	8.7
10	5.74	3.02	0.39	bd1	3.30	21.4
11	4.46	2.82	0.51	bd1	2.87	10.8
12	2.84	3.14	0.56	bd1	2.55	16.6
13	3.69	3.64	0.74	bd1	3.02	25.0
14	3.29	1.46	0.43	bd1	2.01	16.4
15	1.98	1.61	0.50	bd1	1.87	2.5
16	4.02	2.76	0.24	bd1	2.30	39.9
17	5.21	2.93	0.37	bd1	3.27	9.1
18	4.04	1.24	bd1	bd1	2.38	7.2
19	6.19	3.52	bd1	bd1	3.11	53.9
20	4.62	2.39	0.25	bd1	1.96	188.2
21	5.50	6.53	0.65	bd1	3.88	62.4
22	7.98	6.94	1.83	bd1	5.15	17.4
23	8.88	5.84	0.70	bd1	4.35	71.4
24	6.66	6.91	1.24	bd1	4.51	12.9
25	1.04	2.50	0.84	bd1	2.05	5.1
26	1.52	1.86	0.64	bd1	1.68	9.2
27	1.55	1.26	0.46	bd1	1.54	15.0
28	2.77	3.09	0.33	bd1	2.22	47.5
29	7.56	4.00	0.25	bd1	3.64	39.7
30	15.77	3.24	0.31	bd1	5.39	40.2
31	4.51	1.95	0.33	bd1	2.75	11.8

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	31	31	-	31	31
A. MEAN	4.20	3.07	0.54	-	2.74	26.9
S.D.	3.05	1.63	0.38	-	1.05	34.9
MIN.	0.86	0.76	bd1	-	1.30	2.5
MAX.	15.77	6.94	1.83	-	5.39	188.2

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

TORONTO

JUNE 1980

DAY	AIR CONCENTRATIONS (10^{-6} gm^{-3})					GAS SO ₂
	PARTICULATE					
	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	
1	3.06	1.94	0.32	bd1	2.16	8.1
2	7.73	4.20	0.54	bd1	3.84	84.8
3	5.53	2.24	0.28	bd1	2.38	13.5
4	1.50	2.40	0.32	bd1	1.42	5.4
5	1.73	3.00	0.34	bd1	1.65	22.6
6	6.37	3.79	0.29	0.12	3.50	32.2
7	7.58	2.59	0.26	0.06	3.47	10.2
8	1.91	1.42	0.32	bd1	1.59	15.5
9	1.11	1.74	0.40	bd1	1.64	5.1
10	0.90	1.29	0.37	bd1	1.33	5.1
11	0.98	1.95	0.46	bd1	1.47	11.2
12	4.74	3.55	0.30	bd1	2.87	34.0
13	16.47	2.78	bd1	bd1	4.13	20.7
14	16.53	7.27	bd1	bd1	6.18	30.8
15	4.93	4.49	0.41	bd1	3.15	8.7
16	1.73	2.94	0.40	bd1	1.75	8.2
17	5.41	3.53	0.30	bd1	2.94	35.0
18	7.26	6.83	0.61	bd1	4.53	39.5
19	8.01	3.52	0.28	bd1	3.72	16.9
20	1.40	2.17	0.34	bd1	1.76	5.1
21	1.99	4.46	0.42	bd1	2.48	8.6
22	9.67	4.99	bd1	bd1	3.66	42.5
23	22.16	3.80	bd1	bd1	5.14	71.1
24	38.86	2.39	bd1	bd1	6.55	102.5
25	25.33	2.87	bd1	bd1	5.51	65.6
26	17.61	5.56	bd1	bd1	5.64	44.2
27	4.20	3.46	0.75	bd1	2.86	6.7
28	3.24	1.60	bd1	bd1	2.05	13.1
29	7.73	2.07	bd1	bd1	2.70	15.0
30	6.06	2.57	bd1	bd1	2.65	9.5

bd1 - BELOW DETECTION LIMIT

NO. OBS.	30	30	30	-	30	30
A. MEAN	8.06	3.25	0.26	-	3.17	26.6
S.D.	8.67	1.49	0.21	-	1.49	25.7
MIN.	0.90	1.29	bd1	-	1.33	5.1
MAX.	38.86	7.27	0.75	-	6.55	102.9

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

APPENDIX 5

MONTHLY SUMMARIES OF
MEASURED CONCENTRATIONS
IN AIR AND PRECIPITATION
AT KEJIMKUJIK

KEJIMKUJIK

JULY 1979

AIR CONCENTRATIONS (10^{-6} gm^{-3})
PARTICULATE

DAY	SO ₄ ⁻	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	GAS SO ₂
1	0.77	bd1 *	0.49	0.19	bd1	0.6
2	5.27	0.92 *	0.82	0.43	1.00	0.7
3	1.93	0.42	1.37	0.52 *	1.40	0.6
4	0.30	0.27	0.30	0.15 *	0.50	1.5
5	0.54	bd1	0.98	0.22 *	0.61	0.3
6	0.57	0.35	0.44	0.18 *	0.65	0.3
7	0.44	0.31	0.40	bd1 *	0.61	1.3
8	2.40	1.15	0.31	0.27 *	1.50	2.4
9	9.53	1.87	0.41	0.41 *	2.98	1.9
10	13.30	1.87	bd1	0.55	1.52	2.3
11	3.56	0.72	0.55	0.55	0.91	1.2
12	3.15	0.43	0.26	0.29	0.91	bd1
13	10.81	0.30	bd1	0.15	2.53	1.8
14	1.23	0.20	bd1	bd1	0.48	2.0
15	2.70	0.57	0.55	0.45	bd1	0.4
16	5.92	bd1	bd1	0.29	0.77	0.3
17	0.64	bd1	bd1	bd1	bd1	bd1
18	0.61 *	0.40	0.27	0.18	0.51	bd1
19	3.30 *	0.37	bd1	bd1	0.90	0.6
20	5.85 *	0.80	bd1	bd1	1.45	0.7
21	2.58 *	0.54	bd1	bd1	1.31	1.3
22	11.94 *	1.94	bd1	0.27	2.36	3.0
23	2.52 *	0.68	bd1	bd1	1.28	1.9
24	6.48	0.53	bd1	bd1	1.47	0.6
25	6.29	0.30	bd1	bd1	1.23	2.6
26	4.23	0.60	bd1	bd1	1.03	1.0
27	0.86	0.29	bd1	bd1	0.64	1.2
28	5.78	0.73	bd1	0.19	1.50	0.4
29	11.67	0.57	bd1	bd1	1.75	0.8
30	6.14	0.36	bd1	bd1	1.40	1.3
31	7.73	0.40	bd1	bd1	1.16	1.8

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	31	-	31	31	31
A. MEAN	4.49	0.58	-	0.16	1.11	1.1
S.D.	3.81	0.51	-	0.18	0.69	0.8
MIN.	0.30	bd1	-	bd1	bd1	bd1
MAX.	13.30	1.94	-	0.55	2.98	3.0

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		PH		(10 ⁻³ g l ⁻¹)										ION BAL.	
	STD (mm)	COLL (mm)	FIELD	LAB	SO ₄ ⁻	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P		RATIO +VE/-VE	PRECIP TYPE
1	13.3	12.7	4.50	4.70	1.3	0.624	0.3	bd1	0.094	0.05	0.21	0.04	0.016	-	-	1
2	11.2	8.5	4.50	5.20	0.6	0.235	0.2	bd1	0.032	0.02	0.11	0.03	0.021	-	-	1
4	-	15.3	5.00	4.70	1.6	0.620	0.3	bd1	0.088	0.05	0.21	0.04	0.020	-	-	1
16	40.0	33.2	4.60	4.90	1.1	0.323	0.2	bd1	0.084	0.02	0.22	0.04	0.037	-	-	1
26	0.1	0.3	-	-	14.2	-	3.3	-	-	-	-	-	-	-	-	1
27	40.5	39.7	5.00	5.10	0.5	0.266	0.2	0.03	0.019	0.02	0.20	0.03	0.023	1.02	-	1
28	8.8	9.4	4.40	4.60	2.6	0.575	2.1	0.14	0.297	0.14	1.40	0.26	0.030	1.01	-	1
TOTAL PRECIP	113.9	119.1														
NO. OBS.	6	7	6	6	7	6	7	-	6	6	6	6	6	-	-	
A. MEAN	19.0	17.0	4.61	4.81	3.2	0.441	0.9	-	0.102	0.05	0.39	0.07	0.025	-	-	
STD. DEV.	17.1	14.2	4.91	5.12	4.9	0.185	1.3	-	0.100	0.05	0.50	0.09	0.008	-	-	
MINIMUM	0.1	0.3	4.40	4.60	0.5	0.235	0.2	-	0.019	0.02	0.11	0.03	0.016	-	-	
MAXIMUM	40.5	39.7	5.00	5.20	14.2	0.624	3.3	-	0.297	0.14	1.40	0.26	0.037	-	-	
P.W. MEAN			4.65	4.82	1.0	0.345	0.4	-	0.073	0.03	0.29	0.05	0.027	-	-	

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
- 2 - SNOW
- 3 - MIXED
- 4 - UNCERTAIN

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

KEJINKUJIK

AUGUST 1979

AIR CONCENTRATIONS (10^{-6} g m^{-3})

DAY	FARTICULATE					GAS
	SO_4^{2-}	NO_3^-	Cl^-	Na^+	NH_4^+	SO_2
1	14.01	0.39	bd1	0.20	1.38	1.2
2	8.39	0.48	0.35	0.27	1.16	bd1
3	12.71	0.69	bd1	0.44	1.85	0.2
4	0.47	bd1	0.37	0.19	bd1	0.4
5	2.65	0.51	0.30	0.20	0.54	1.4
6	2.64	0.33	bd1	bd1	0.95	1.8
7	1.04	0.27	0.37	bd1	bd1	bd1
8	3.51	0.55	0.46	0.46	0.71	1.4
9	0.30	bd1	0.33	bd1	bd1	0.8
10	0.57	bd1	bd1	bd1	bd1	0.4
11	2.07	bd1	bd1	bd1	bd1	0.5
12	1.12	bd1	bd1	bd1	bd1	1.0
13	0.86	bd1	0.57	bd1	0.95	0.3
14	10.34	2.71 *	0.79	1.20	1.61	2.8
15	3.47	0.59	bd1	0.20	0.61	2.8
16	1.35	bd1	bd1	bd1	bd1	0.9
17	0.50	bd1	bd1	bd1	bd1	1.6
18	0.60	bd1	bd1	0.18	bd1	0.4
19	0.63	0.24 *	0.77	0.42	bd1	1.5
20	0.84	bd1 *	1.03	0.57	bd1	0.7
21	1.20	0.41	0.73	0.31	bd1	0.5
22	1.18	bd1	bd1	bd1	bd1	1.7
23	1.95	bd1	bd1	bd1	bd1	0.3
24	5.46	0.77	bd1	0.21	1.25	0.9
25	5.26	0.80	0.71	0.64	0.93	1.5
26	5.88	0.50	bd1	bd1	1.63	1.0
27	3.98	0.29	bd1	bd1	0.93	0.7
28	2.99	bd1	bd1	bd1	bd1	bd1
29	3.46	0.25	bd1	bd1	bd1	2.0
30	2.90	0.34	0.53	0.32	bd1	0.7
31	1.26	bd1	0.61	bd1	bd1	2.3

bd1 - BELOW DETECTION LIMIT

NO. OBS.	31	31	-	-	-	31
A. MEAN	3.34	0.34	-	-	-	1.0
S.D.	3.58	0.53	-	-	-	0.8
MIN.	0.30	bd1	-	-	-	bd1
MAX.	14.01	2.71	-	-	-	2.8

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		pH		(10 ⁻³ g l ⁻¹)										ION BAL. RATIO		PRECIP TYPE
	STD (mm)	COLL (mm)	FIELD	LAB	SO ₄ ⁻	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	+VE/-VE			
2	0.8	1.5	-	4.20	6.2	-	1.5	0.29	-	0.10	-	-	0.140	-	1		
3	23.8	23.5	4.30	4.40	2.0	0.885	0.1	0.03	0.164	0.02	0.13	0.05	0.026	0.98	1		
4	1.0	4.9	-	5.00	1.3	0.664	0.6	0.15	0.049	0.06	0.87	0.05	0.130	1.16	1		
8	2.0	1.3	-	3.40	18.2	-	2.2	0.61	-	0.22	-	-	-	-	1		
10	19.2	17.9	3.90	4.30	2.4	1.018	0.1	0.06	0.084	0.01	0.15	0.03	0.023	0.95	1		
11	0.8	0.7	-	-	7.4	-	0.3	0.19	-	0.03	-	-	-	-	1		
12	36.9	44.0	3.90	4.50	2.0	0.620	0.3	0.06	0.113	0.02	0.45	0.06	0.044	1.05	1		
15	2.2	4.9	-	4.40	2.2	1.240	1.2	0.11	0.088	0.10	1.02	0.07	0.057	1.05	1		
19	6.5	6.2	-	4.70	1.0	0.398	0.6	0.04	0.014	0.64	0.56	0.09	0.170	1.16	1		
20	2.2	2.0	-	5.10	1.6	-	0.7	0.12	-	0.06	-	-	-	-	1		
21	34.0	22.5	4.50	5.30	0.2	0.089	bd1	bd1	0.008	bd1	0.07	0.02	0.020	-	1		
25	1.5	0.7	-	5.00	2.2	-	0.7	0.25	-	0.06	-	-	-	-	1		
27	6.9	6.2	-	3.90	7.8	4.383	0.7	0.12	0.680	0.09	0.80	0.23	0.240	0.86	1		
30	15.7	4.9	-	4.00	3.9	2.523	0.7	0.07	0.231	0.05	0.61	0.12	-	1.07	1		
TOTAL PRECIP	153.5	141.2															
NO. OBS.	14	14	-	13	14	-	14	14	-	14	-	-	-	-	-		
A. MEAN	11.0	10.1	-	4.16	4.2	-	0.7	0.15	-	0.06	-	-	-	-	-		
STD. DEV.	12.8	12.6	-	3.98	4.7	-	0.6	0.16	-	0.06	-	-	-	-	-		
MINIMUM	0.8	0.7	-	3.40	0.2	-	bd1	bd1	-	bd1	-	-	-	-	-		
MAXIMUM	36.9	44.0	-	5.30	18.2	-	2.2	0.61	-	0.22	-	-	-	-	-		
P.W. MEAN			-	4.35	2.3	-	0.3	0.06	-	0.03	-	-	-	-	-		

PRECIP TYPE

T - TRACE AMOUNT

1 - RAIN

2 - SNOW

3 - MIXED

4 - UNCERTAIN

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

KEJIMKUJIK
SEPTEMBER 1979

DAY	AIR CONCENTRATIONS (10^{-6}gm^{-3})					GAS SO ₂
	PARTICULATE					
	SO ₄ ⁼	NC ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	
1	0.77	0.56	0.42	0.52	bd1	0.9
2	3.73	1.39	0.43	0.54	1.03	2.6
3	6.25	0.56	bd1	bd1	1.03	0.7
4	-	-	-	-	-	-
5	-	-	-	-	-	-
6	0.28	bd1	0.23	bd1	bd1	1.1
7	0.66	bd1	0.27	bd1	bd1	0.5
8	1.83	0.22	0.55	0.38	0.56	0.8
9	0.64	0.15	bd1	bd1	bd1	0.2
10	1.68	0.29	0.22	0.22	0.40	0.2
11	0.72	0.17	0.48	0.30	bd1	0.5
12	0.74	bd1	bd1	0.20	bd1	1.5
13	2.15	0.32	bd1	bd1	bd1	0.9
14	1.29	0.25	0.59	0.44	bd1	0.2
15	0.80	bd1	bd1	0.16	bd1	1.1
16	2.21	0.21	bd1	0.16	0.38	0.9
17	5.32	1.03	bd1	0.44	0.93	1.2
18	7.65	1.79	0.26	* 0.92	1.36	2.1
19	-	-	-	-	-	-
20	-	-	-	-	-	-
21	-	-	-	-	-	-
22	1.37	bd1	0.31	* 0.24	bd1	1.0
23	0.39	0.14	0.36	* 0.24	bd1	1.0
24	0.52	0.23	bd1	bd1	bd1	0.3
25	-	-	-	-	-	-
26	3.44	0.89	0.50	0.51	0.84	2.6
27	0.56	bd1	0.22	0.16	bd1	0.9
28	3.60	1.07	bd1	0.24	0.93	2.0
29	2.66	0.23	0.26	0.20	0.63	0.9
30	1.80	0.30	0.95	0.87	bd1	1.5

bd1 - BELOW DETECTION LIMIT

NO. OBS.	24	24	24	24	24	24
A. MEAN	2.13	0.41	0.25	0.26	0.34	1.1
S.D.	1.97	0.48	0.25	0.25	0.45	0.7
MIN.	0.28	bd1	bd1	bd1	bd1	0.2
MAX.	7.65	1.79	0.95	0.92	1.36	2.6

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		PH		(10^{-3}gl^{-1})									ION BAL.	
	STD (mm)	COLL (mm)	FIELD	LAB	$\text{SO}_4^{=}$	NO_3^{-}	Cl^{-}	Ca^{++}	NH_4^{+}	Mg^{++}	Na^{+}	K^{+}	TOT P	RATIO +VE/-VE	PRECIP TYPE
6	14.6	12.1	4.30	4.50	2.1	1.417	2.0	0.25	0.106	0.14	1.32	0.07	0.046	0.97	1
10	4.4	4.6	-	4.20	4.2	1.726	0.9	0.13	0.357	0.09	0.82	0.07	-	0.95	1
14	29.0	25.4	4.90	5.10	0.8	0.221	0.3	0.03	0.018	0.02	0.28	0.04	0.035	0.85	1
19	11.0	12.1	4.30	3.60	8.9	4.205	0.4	0.12	0.598	0.04	0.38	0.07	0.080	0.83	1
21	5.8	6.5	-	4.40	2.2	1.549	0.9	0.05	0.375	0.06	0.50	0.03	0.014	0.94	1
22	11.8	19.5	4.70	4.80	0.7	0.930	0.1	bd1	0.255	0.01	0.15	0.02	0.061	-	1
28	4.2	5.2	-	4.40	1.5	1.726	0.4	0.07	0.207	0.04	0.50	0.04	-	1.17	1
TOTAL PRECIP	80.8	85.4													
NO. OBS.	7	7	-	7	7	7	7	7	7	7	7	7	-	6	
A. MEAN	11.5	12.2	-	4.29	2.9	1.682	0.7	0.09	0.274	0.06	0.56	0.05	-	0.95	
STD. DEV.	8.7	7.8	-	4.30	2.9	1.235	0.6	0.08	0.192	0.04	0.39	0.02	-	0.12	
MINIMUM	4.2	4.6	-	3.80	0.7	0.221	0.1	bd1	0.018	0.01	0.15	0.02	-	0.83	
MAXIMUM	29.0	25.4	-	5.10	8.9	4.205	2.0	0.25	0.598	0.14	1.32	0.07	-	1.17	
P.W. MEAN			-	4.39	2.4	1.339	0.7	0.09	0.201	0.05	0.52	0.05	-		

PRECIP TYPE T - TRACE AMOUNT
1 - RAIN
2 - SNOW
3 - MIXED
4 - UNCERTAIN

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

KEJIMKUIK

OCTOBER 1979

AIR CONCENTRATIONS (10^{-6} gm^{-3})

DAY	PARTICULATE					GAS
	$\text{SO}_4^{=}$	NO_3^-	Cl^-	Na^+	NH_4^+	SO_2
1	3.10	0.51	0.97	0.89	0.53	0.6
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	6.77	1.58	bd1	0.43	1.10	0.6
5	7.41	0.47	bd1	0.18	0.80	0.8
6	-	-	-	-	-	-
7	-	-	-	-	-	-
8	1.06	0.20	0.79	0.45	0.41	0.5
9	-	-	-	-	-	-
10	0.61	bd1	bd1	bd1	bd1	1.2
11	1.12	bd1	bd1	bd1	bd1	0.6
12	1.44	0.33	bd1	bd1	bd1	1.3
13	2.73	0.80	0.67	0.57	0.83	1.1
14	0.67	bd1	bd1	0.15	bd1	0.6
15	1.16	bd1	0.34	0.24	bd1	-
16	1.07	0.32	0.39	0.27	bd1	1.9
17	0.38	0.22	bd1	bd1	bd1	-
18	3.72	0.80	bd1	0.18	0.79	-
19	0.71	0.25	bd1	bd1	bd1	-
20	2.72	0.73	0.27	0.19	bd1	-
21	5.63	1.39	0.25	0.43	0.87	-
22	-	-	-	-	-	-
23	-	-	-	-	-	-
24	-	-	-	-	-	-
25	0.50	bd1	bd1	bd1	bd1	-
26	2.29	0.67	0.46	0.44	bd1	-
27	1.65	0.31	bd1	bd1	bd1	-
28	1.73	0.21	bd1	bd1	bd1	-
29	bd1	bd1	bd1	bd1	bd1	-
30	1.88	0.15	0.35	0.24	bd1	-
31	0.54	bd1	bd1	bd1	bd1	-

bd1 - BELOW DETECTION LIMIT

NO. OBS.	-	-	-	-	-	-
A. MEAN	-	-	-	-	-	-
S.D.	-	-	-	-	-	-
MIN.	-	-	-	-	-	-
MAX.	-	-	-	-	-	-

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10 ⁻³ g l ⁻¹)															ION BAL.		PRECIP TYPE
DAY	AMOUNT		PH	LAB	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO +VE/-VE			
	STD (mm)	COLL (mm)															
1	5.4	4.6	-	4.50	1.2	1.195	0.1	-	0.193	0.03	0.35	0.03	0.123	-	1		
3	26.0	23.8	4.80	4.80	0.8	0.310	0.4	0.04	0.035	0.02	0.30	0.04	0.017	1.09	1		
5	15.2	21.2	5.30	4.90	0.7	0.133	0.3	0.02	0.001	0.01	0.30	0.04	0.041	1.14	1		
7	31.6	29.0	4.40	4.50	1.9	0.664	1.6	0.10	0.135	0.10	0.87	0.10	0.039	0.97	1		
8	4.8	5.5	-	4.40	1.8	0.664	1.5	0.18	0.085	0.11	0.83	0.10	0.050	1.12	1		
9	11.6	19.2	4.40	4.60	1.9	0.664	1.5	0.10	0.134	0.10	0.92	0.10	0.064	0.96	1		
10	8.7	9.1	4.30	4.40	1.8	0.841	1.0	0.10	0.073	0.07	0.50	0.08	0.011	0.99	1		
12	12.0	10.1	-	4.30	1.9	0.841	1.0	0.10	0.070	0.07	0.50	0.08	0.019	1.09	1		
13	17.3	20.5	4.00	4.30	2.0	1.240	1.7	0.10	0.097	0.11	0.99	0.10	0.039	1.05	1		
TOTAL PRECIP 132.6 143.0																	
NO. OBS.	9	9	-	9	9	9	9	8	9	9	9	9	9	8			
A. MEAN	14.7	15.9	-	4.48	1.6	0.728	1.0	0.09	0.091	0.07	0.62	0.07	0.045	1.05			
STD. DEV.	9.1	8.7	-	4.67	0.5	0.362	0.6	0.05	0.057	0.04	0.28	0.03	0.034	0.07			
MINIMUM	4.8	4.6	-	4.30	0.7	0.133	0.1	0.02	0.001	0.01	0.30	0.03	0.011	0.96			
MAXIMUM	31.6	29.0	-	4.90	2.0	1.240	1.7	0.18	0.193	0.11	0.99	0.10	0.123	1.14			
P.W. MEAN			-	4.51	1.5	0.658	1.1	0.08	0.086	0.07	0.63	0.08	0.037				

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
- 2 - SNOW
- 3 - MIXED
- 4 - UNCERTAIN

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

KEJINKUJIK

NOVEMBER 1979

DAY	AIR CONCENTRATIONS (10^{-6} g m^{-3})					GAS SO ₂
	PARTICULATE					
	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	
1	2.74	0.39	0.35	0.33	bd1	-
2	1.25	0.25	0.86	0.58	bd1	-
3	0.37	bd1	0.44	0.23	bd1	-
4	-	-	-	-	-	-
5	-	-	-	-	-	-
6	-	-	-	-	-	-
7	1.76	bd1	0.48	0.35	bd1	1.8
8	7.67	1.56	bd1	0.34	1.00	5.0
9	7.65	3.21	0.47	0.71	1.46	8.9
10	3.80	0.76	0.68	0.59	0.62	3.1
11	2.43	0.19	bd1	bd1	0.51	1.4
12	0.63	bd1	bd1	bd1	bd1	1.4
13	1.29	0.28	0.67	0.42	bd1	0.8
14	0.19	bd1	bd1	bd1	bd1	0.8
15	2.04	0.22	0.45	0.34	bd1	3.5
16	2.15	0.45	0.35	0.34	bd1	4.1
17	1.50	0.41	0.54	0.46	bd1	2.2
18	0.72	bd1	0.89	0.59	bd1	4.8
19	0.64	0.21	bd1	0.35	bd1	5.6
20	1.11	* 0.52	bd1	0.15	bd1	3.3
21	2.56	* 0.34	bd1	bd1	bd1	2.3
22	3.24	* 1.32	0.31	0.46	0.47	1.5
23	5.20	* 1.21	0.49	0.69	0.79	3.5
24	4.40	* 0.41	bd1	0.32	bd1	1.1
25	3.45	* 0.80	bd1	0.27	0.57	2.2
26	2.65	* 0.55	0.79	0.53	bd1	0.7
27	3.83	1.48	1.55	0.94	0.92	2.7
28	3.75	2.45	1.59	1.10	1.00	4.6
29	1.21	0.24	0.70	0.41	bd1	2.5
30	2.36	0.97	0.87	0.78	0.42	3.1

bd1 - BELOW DETECTION LIMIT

NO. OBS.	27	27	27	27	-	24
A. MEAN	2.61	0.68	0.46	0.42	-	2.9
S.D.	1.95	0.78	0.45	0.28	-	1.9
MIN.	0.19	bd1	bd1	bd1	-	0.7
MAX.	7.67	3.21	1.59	1.10	-	8.9

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		pH		ION BAL. (10^{-3} g l^{-1})										PRECIP TYPE
	STD (mm)	COLL (mm)	FIELD	LAB	$\text{SO}_4^{=}$	NO_3^-	Cl^-	Ca^{++}	NH_4^+	Mg^{++}	Na^+	K^+	TOT P	RATIO +VE/-VE	
2	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	1
3	62.2	-	-	-	-	-	-	-	-	-	-	-	-	-	1
4	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	1
7	13.2	-	-	4.80	-	-	-	-	-	-	-	-	-	-	1
9	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	1
10	4.5	-	-	-	-	-	-	-	-	-	-	-	-	-	1
11	15.8	-	-	-	-	-	-	-	-	-	-	-	-	-	1
12	6.2	-	-	-	-	-	-	-	-	-	-	-	-	-	1
13	27.0	-	-	-	-	-	-	-	-	-	-	-	-	-	1
14	31.0	-	-	-	-	-	-	-	-	-	-	-	-	-	1
16	8.8	-	-	4.30	1.8	-	1.1	0.25	-	0.12	0.80	0.10	-	-	1
20	16.0	-	-	-	-	-	-	-	-	-	-	-	-	-	1
22	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	1
24	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	1
25	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	1
26	11.0	9.4	4.70	4.70	3.0	1.549	2.9	0.75	0.228	0.24	1.58	0.12	0.025	0.95	1
TOTAL PRECIP	201.6	9.4	-	-	-	-	-	-	-	-	-	-	-	-	-
NO. OBS.	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A. MEAN	12.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STD. DEV.	16.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MINIMUM	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAXIMUM	62.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P.W. MEAN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
2 - SNOW
3 - MIXED
4 - UNCERTAIN

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

KEJINKUJIK

DECEMBER 1979

DAY	AIR CONCENTRATIONS (10^{-6} gm^{-3})					GAS SO ₂
	PARTICULATE					
	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	
1	2.70	1.32	0.39	0.24	0.71	5.1
2	1.76	0.38	3.23	2.57	bd1	3.2
3	0.94	0.65	1.28	0.97	bd1	2.2
4	2.67	1.42	1.10	0.85	0.62	5.7
5	-	-	-	-	-	5.5
6	-	-	-	-	-	7.3
7	-	-	-	-	-	4.2
8	-	-	-	-	-	4.7
9	-	-	-	-	-	2.3
10	-	-	-	-	-	4.7
11	bd1	bd1	bd1	bd1	bd1	3.3
12	1.46	1.31	0.80	0.63	bd1	4.6
13	1.06	0.20	0.73	0.47	bd1	2.2
14	0.59	bd1	0.35	0.22	bd1	0.8
15	1.06	bd1	0.31	0.16	bd1	2.9
16	0.43	bd1	0.55	0.30	bd1	1.8
17	1.01	bd1	bd1	0.32	bd1	4.7
18	1.95	bd1	0.55	0.33	bd1	8.7
19	2.02	bd1	bd1	bd1	bd1	1.0
20	2.25	0.39	bd1	0.16	bd1	1.2
21	1.60	0.29	bd1	bd1	bd1	0.6
22	-	-	-	-	-	-
23	-	-	-	-	-	-
24	-	-	-	-	-	-
25	-	-	-	-	-	-
26	-	-	-	-	-	-
27	-	-	-	-	-	-
28	-	-	-	-	-	-
29	-	-	-	-	-	-
30	-	-	-	-	-	-
31	-	-	-	-	-	-

bd1 - BELOW DETECTION LIMIT

NO. OBS.	-	-	-	-	-	-
A. MEAN	-	-	-	-	-	-
S.D.	-	-	-	-	-	-
MIN.	-	-	-	-	-	-
MAX.	-	-	-	-	-	-

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		PH	LAB	(10^{-3} g l^{-1})								TOT P	ION BAL. RATIO +VE/-VE	PRECIP TYPE
	STD (mm)	COLL (mm)			$\text{SO}_4^{=}$	NO_3^-	Cl^-	Ca^{++}	NH_4^+	Mg^{++}	Na^+	K^+			
4	5.0	0.7	-	3.80	-	8.057	-	-	1.099	-	-	-	-	-	2
6	41.0	43.6	5.30	4.80	1.2	0.664	3.6	0.11	0.022	0.23	1.82	0.07	0.023	0.88	1
12	9.6	4.4	-	4.10	4.6	4.914	4.0	-	0.222	-	-	-	-	-	1
16	10.6	13.0	5.70	5.10	0.7	0.221	1.0	bd1	0.006	0.06	0.50	0.04	0.027	-	1
17	4.2	6.4	-	5.30	0.6	0.044	1.6	bd1	0.003	0.09	0.76	0.03	0.016	-	2
TOTAL PRECIP	70.4	68.1													
NO. OBS.	5	5	-	5	4	5	4	-	5	-	-	-	-	-	-
A. MEAN	14.1	13.6	-	4.27	1.8	2.760	2.6	-	0.270	-	-	-	-	-	-
STD. DEV.	15.3	17.3	-	4.16	1.9	3.568	1.5	-	0.472	-	-	-	-	-	-
MINIMUM	4.2	0.7	-	3.80	0.6	0.044	1.0	-	0.003	-	-	-	-	-	-
MAXIMUM	41.0	43.6	-	5.30	4.6	8.057	4.0	-	1.099	-	-	-	-	-	-
P.W. MEAN			-	4.48	1.6	1.665	3.1	-	0.122	-	-	-	-	-	-

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
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DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

KEJIMKUJIK

JANUARY 1980

AIR CONCENTRATIONS (10^{-6}gm^{-3})

DAY	PARTICULATE					GAS
	$\text{SO}_4^{=}$	NO_3^{-}	Cl^{-}	Na^{+}	NH_4^{+}	SO_2
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	0.98	0.20	0.66	0.39	bd1	2.6
4	0.83	0.25	0.66	0.41	0.28	1.5
5	1.03	0.15	0.32	0.23	bd1	bd1
6	1.01	0.25	0.42	0.30	bd1	3.3
7	3.99	1.50	1.64	1.21	0.73	6.4
8	-	-	-	-	-	-
9	-	-	-	-	-	-
10	-	-	-	-	-	-
11	-	-	-	-	-	-
12	-	-	-	-	-	-
13	-	-	-	-	-	-
14	-	-	-	-	-	-
15	1.25	0.21	0.81	0.49	0.30	1.5
16	1.56	0.30	1.13	0.74	0.31	2.1
17	1.17	0.63	0.39	0.26	bd1	bd1
18	0.36	bd1	bd1	bd1	bd1	bd1
19	2.01	0.53	bd1	0.09	0.36	2.7
20	1.42	0.20	1.30	0.59	0.32	3.4
21	1.42	0.31	-	0.61	0.36	2.3
22	0.47	0.15	0.33	0.18	0.28	1.1
23	-	-	-	-	-	-
24	-	-	-	-	-	-
25	1.42	0.44	0.93	0.57	0.45	2.9
26	1.29	0.53	-	0.82	0.32	1.6
27	-	-	-	-	-	-
28	1.05	0.41	-	0.59	bd1	1.1
29	-	-	-	-	-	-
30	0.56	bd1	bd1	bd1	bd1	24.4
31	1.34	0.30	0.25	0.20	0.43	5.0

bd1 - BELOW DETECTION LIMIT

NO. OBS.	-	-	-	-	-	-
A. MEAN	-	-	-	-	-	-
S.D.	-	-	-	-	-	-
MIN.	-	-	-	-	-	-
MAX.	-	-	-	-	-	-

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

 (10^{-3}g l^{-1})

DAY	AMOUNT		PH		$\text{SO}_4^{=}$	NO_3^{-}	Cl^{-}	Ca^{++}	NH_4^{+}	Mg^{++}	Na^{+}	K^{+}	TOT P	ION BAL. RATIO PRECIP	
	STD (mm)	COLL (mm)	FIELD	LAB										+VE/-VE	TYPE
7	4.5	5.2	-	4.30	6.1	2.302	10.0	-	0.156	-	-	-	-	-	1
11	20.0	23.8	4.80	4.70	1.5	0.487	5.6	0.05	bd1	0.36	2.88	0.11	0.007	-	1
12	7.3	6.8	4.80	4.60	1.3	0.620	3.1	-	0.021	-	-	-	0.020	-	3
15	2.0	1.6	-	5.00	2.6	1.284	2.3	-	0.064	-	-	-	-	-	1
16	1.3	2.3	-	4.50	2.2	0.487	1.4	-	0.035	-	-	-	-	-	1
17	1.2	2.0	-	4.30	3.0	bd1	2.2	-	bd1	-	1.32	0.10	-	-	1
18	2.8	3.3	-	4.30	1.5	1.682	0.6	0.68	bd1	0.04	0.30	0.05	0.008	-	1
20	3.4	3.9	-	4.30	3.5	1.815	13.3	-	bd1	-	6.80	0.30	0.012	-	3
22	18.8	18.2	5.10	5.10	0.4	0.177	0.4	0.60	0.001	0.03	0.10	bd1	0.006	-	2
23	9.4	9.1	-	4.50	1.5	0.930	0.8	1.35	bd1	0.05	0.52	0.05	0.046	-	2
24	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	2
30	1.0	2.0	-	5.10	2.4	2.390	12.7	1.38	0.144	0.92	-	-	-	-	2
TOTAL PRECIP	71.7	80.2													
NO. OBS.	11	12	-	11	11	11	11	-	-	-	-	-	-	-	
A. MEAN	6.5	6.7	-	4.53	2.4	1.107	4.8	-	-	-	-	-	-	-	
STD. DEV.	6.9	7.2	-	4.74	1.5	0.841	4.9	-	-	-	-	-	-	-	
MINIMUM	1.0	1.6	-	4.30	0.4	bd1	0.4	-	-	-	-	-	-	-	
MAXIMUM	20.0	23.8	-	5.10	6.1	2.390	13.3	-	-	-	-	-	-	-	
P.W. MEAN			-	4.64	1.7	0.742	3.7	-	-	-	-	-	-	-	

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
2 - SNOW
3 - MIXED
4 - UNCERTAIN

DAY() - DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

KEJIMKUJIK

FEBRUARY 1980

AIR CONCENTRATIONS (10^{-6}gm^{-3})

DAY	PARTICULATE					GAS
	$\text{SO}_4^{=}$	NO_3^-	Cl^-	Na^+	NH_4^+	SO_2
1	1.41	0.24	0.39	0.32	bd1	6.2
2	0.86	0.14	0.34	0.17	bd1	3.4
3	bd1	bd1	bd1	bd1	bd1	2.6
4	0.32	bd1	bd1	bd1	bd1	bd1
5	1.23	0.21	bd1	0.15	bd1	2.0
6	0.94	bd1	bd1	0.07	bd1	0.8
7	1.03	bd1	0.23	0.13	bd1	1.5
8	0.97	bd1	0.34	0.21	bd1	-
9	2.18	0.65	bd1	0.14	0.32	-
10	2.23	0.32	0.26	0.18	bd1	2.6
11	1.61	0.20	0.33	0.24	0.44	3.6
12	0.91	0.28	0.24	0.15	bd1	8.4
13	2.36	0.27	0.41	0.30	0.34	10.8
14	4.45	0.61	0.53	0.40	1.09	8.5
15	1.67	0.25	0.74	0.45	0.37	2.3
16	0.99	0.18	0.29	0.11	bd1	1.4
17	1.56	0.26	0.73	0.41	0.27	1.7
18	3.23	1.52	1.03	0.85	0.63	5.4
19	4.86	3.36	2.22	2.04	0.64	5.6
20	6.29	4.33	0.95	1.50	0.83	4.9
21	4.19	1.40	0.64	0.76	0.32	4.0
22	0.47	0.13	0.41	0.17	bd1	1.6
23	3.38	0.71	0.41	0.34	bd1	1.2
24	3.09	0.73	0.27	0.25	-	1.5
25	4.15	0.76	0.68	0.47	0.96	5.9
26	0.44	bd1	bd1	0.15	bd1	1.6
27	0.96	0.20	bd1	0.18	bd1	1.9
28	0.65	0.15	bd1	0.12	bd1	1.7
29	0.98	0.25	0.40	0.32	bd1	7.3

bd1 - BELOW DETECTION LIMIT

NO. OBS.	29	29	29	29	-	27
A. MEAN	2.05	0.60	0.41	0.37	-	3.7
S.D.	1.61	0.99	0.46	0.44	-	2.8
MIN.	bd1	bd1	bd1	bd1	-	bd1
MAX.	8.29	4.33	2.22	2.04	-	10.8

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10 ⁻³ g l ⁻¹)													ION BAL. RATIO		PRECIP TYPE
DAY	AMOUNT		pH		SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	+VE/-VE	
	STD (mm)	COLL (mm)	FIELD	LAB											
2	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	
5	1.8	1.0	-	5.20	1.9	0.885	7.7	-	0.058	-	-	-	-	-	
16	1.5	14.0	4.60	4.40	1.9	1.461	3.0	0.34	0.187	0.22	0.44	0.18	0.025	0.74	
17	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	
22	16.0	17.3	4.50	4.60	1.2	0.531	0.6	0.12	0.075	0.06	1.17	0.18	0.029	1.93	
28	14.0	4.6	-	4.50	1.3	1.549	1.6	0.12	0.070	0.31	1.66	0.27	0.013	1.50	
TOTAL PRECIP	35.3	36.9													
NO. OBS.	6	4	-	4	4	4	4	-	4	-	-	-	-	-	
A. MEAN	5.9	9.2	-	4.59	1.6	1.107	3.2	-	0.098	-	-	-	-	-	
STD. DEV.	7.1	7.7	-	4.85	0.4	0.484	3.1	-	0.060	-	-	-	-	-	
MINIMUM	1.0	1.0	-	4.40	1.2	0.531	0.6	-	0.058	-	-	-	-	-	
MAXIMUM	16.0	17.3	-	5.20	1.9	1.549	7.7	-	0.187	-	-	-	-	-	
P.W. MEAN			-	4.56	1.3	1.020	1.5	-	0.077	-	-	-	-	-	

PRECIP TYPE
 1 - RAIN
 2 - SNOW
 3 - MIXED
 4 - UNCERTAIN

T - TRACE AMOUNT

DAY () - DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
 IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

KEJIMKUJIK

MARCH 1960

AIR CONCENTRATIONS (10^{-6} gm^{-3})							GAS
PARTICULATE							
DAY	$\text{SO}_4^{=}$	NO_3^{-}	Cl^{-}	Na^{+}	NH_4^{+}	SO_2	
1	0.34	bd1	bd1	bd1	bd1	10.7	
2	bd1	bd1	bd1	bd1	bd1	bd1	
3	1.04	0.20	0.23 *	0.25	0.27	5.4	
4	1.53	0.52	0.45	0.15	bd1	9.2	
5	3.90	2.15	0.65	0.48	1.31	4.6	
6	6.48	0.87	0.87	-	-	1.7	
7	2.73	1.09	0.58	0.56	0.99	2.1	
8	2.40	0.41	bd1	0.08	bd1	1.5	
9	-	-	-	-	-	1.7	
10	0.90	0.24	0.34	0.05	bd1	3.0	
11	* 3.93	0.37	0.71	-	-	1.2	
12	* 0.93	0.17	0.72	0.27	bd1	3.2	
13	* 1.07	0.18	0.85	0.52 *	0.28	2.2	
14	* 1.30	0.21	0.48	0.27 *	0.36	1.0	
15	* 2.46	0.18	1.82	0.61 *	1.67	2.2	
16	* 0.58	bd1	0.54	0.26	bd1	6.4	
17	* 2.37	0.56	1.51	0.45 *	1.46	3.8	
18	2.19	0.18	0.86	0.52	0.35	2.0	
19	1.65	bd1	0.59	0.37	bd1	2.3	
20	1.37	0.17	bd1	0.10	bd1	2.4	
21	1.42	bd1	0.82	0.57	0.30	1.0	
22	1.53	0.13	0.65	0.44	0.25	bd1	
23	1.19	bd1	1.01	0.54	bd1	bd1	
24	1.17	bd1	1.23	0.75	0.25	bd1	
25	0.66	bd1	0.48	0.24	bd1	bd1	
26	-	-	-	-	-	-	
27	-	-	-	-	-	-	
28	-	-	-	-	-	-	
29	-	-	-	-	-	-	
30	-	-	-	-	-	-	
31	2.40	bd1	bd1	0.09	0.44	-	

bd1 - BELCW DETECTION LIMIT

NO. OBS.	25	25	25	-	-	25
A. MEAN	1.82	0.31	0.62	-	-	2.7
S.D.	1.38	0.48	0.47	-	-	2.7
MIN.	bd1	bd1	bd1	-	-	bd1
MAX.	6.48	2.19	1.82	-	-	10.7

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10 ⁻³ g _l ⁻¹)															ION BAL.	
DAY	AMOUNT		PH		SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO	PRECIP	
	STD (mm)	COLL (mm)	FIELD	LAB										+VE/-VE	TYPE	
5	8.5	7.5	4.20	4.10	2.9	3.232	2.6	0.30	0.219	0.21	0.14	0.17	0.041	0.73	1	
8	45.0	52.1	4.40	4.40	1.4	0.930	bd1	0.06	0.086	0.04	1.42	0.17	0.015	-	1	
11	23.0	17.9	-	4.70	1.0	0.266	2.2	0.08	0.013	0.11	0.88	0.22	0.018	0.88	1	
14	54.0	48.9	5.00	5.00	0.7	0.221	1.2	0.14	0.042	0.08	2.71	0.25	-	-	1	
18	30.6	29.6	4.60	5.60	1.5	0.531	4.6	0.18	0.106	0.26	1.49	0.23	0.036	0.64	1	
30	15.6	14.0	4.80	4.60	1.1	0.575	0.6	0.06	0.024	0.07	0.49	0.22	0.022	1.25	1	
TOTAL PRECIP	176.7	170.0														
NO. OBS.	6	6	5	6	6	6	6	6	6	6	6	6	5	-		
A. MEAN	29.5	28.3	4.51	4.53	1.4	0.959	1.9	0.14	0.082	0.13	1.19	0.21	0.026	-		
STD. DEV.	17.4	18.6	4.67	4.56	0.8	1.142	1.7	0.09	0.076	0.09	0.91	0.03	0.011	-		
MINIMUM	8.5	7.5	4.20	4.10	0.7	0.221	bd1	0.06	0.013	0.04	0.14	0.17	0.015	-		
MAXIMUM	54.0	52.1	5.00	5.60	2.9	3.232	4.6	0.30	0.219	0.26	2.71	0.25	0.041	-		
H.W. MEAN			4.60	4.65	1.2	0.637	1.6	0.12	0.067	0.11	1.61	0.22	0.023			

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
- 2 - SNOW
- 3 - MIXED
- 4 - UNCERTAIN

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

KEJIMKUJIK

APRIL 1990

AIR CONCENTRATIONS (10^{-6}gm^{-3})
PARTICULATE

DAY	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	GAS SO ₂
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-
5	-	-	-	-	-	-
6	-	-	-	-	-	-
7	-	-	-	-	-	-
8	0.34	bd1	bd1	bd1	bd1	2.3
9	bd1	bd1	bd1	bd1	bd1	bd1
10	bd1	bd1	bd1	bd1	bd1	bd1
11	1.46	0.23	bd1	bd1	bd1	0.9
12	6.82	1.05	bd1	0.08	1.11	3.7
13	3.00	0.85	0.25	0.30	0.86	6.4
14	2.34	0.41	bd1	0.25	0.47	3.3
15	1.51	0.51	0.69	* 0.47	bd1	bd1
16	1.95	0.43	0.26	* 0.25	bd1	bd1
17	1.60	0.18	bd1	* 0.09	-	bd1
18	1.16	0.33	bd1	* 0.10	0.44	1.3
19	1.64	0.29	bd1	* 0.08	0.34	1.7
20	4.75	1.30	1.38	* 0.48	-	bd1
21	5.96	0.88	0.45	* 0.49	1.14	1.1
22	2.09	0.27	0.59	0.26	-	1.9
23	bd1	bd1	bd1	bd1	bd1	bd1
24	1.14	0.17	bd1	0.17	bd1	bd1
25	1.63	0.28	0.30	0.28	0.58	0.8
26	1.86	bd1	bd1	0.07	bd1	0.9
27	0.53	bd1	0.67	0.32	bd1	bd1
28	0.88	0.36	1.26	0.71	bd1	0.6
29	1.83	0.50	1.87	1.25	1.02	bd1
30	-	-	-	-	-	-

bd1 - BELOW DETECTION LIMIT

NO. OBS.	-	-	-	-	-	-
A. MEAN	-	-	-	-	-	-
S.D.	-	-	-	-	-	-
MIN.	-	-	-	-	-	-
MAX.	-	-	-	-	-	-

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10 ⁻³ g l ⁻¹)														ION BAL.	
DAY	AMOUNT		FIELD	LAB	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO	PRECIP
	STD (mm)	COLL (mm)												+VE/-VE	TYPE
4	39.6	46.6	4.90	4.90	0.7	0.044	bd1	bd1	0.027	0.02	0.12	0.14	0.019	-	1
10	4.4	4.9	-	4.70	1.2	0.620	1.7	0.10	0.048	0.12	1.06	0.24	0.023	1.10	1
15	15.6	16.0	4.50	4.70	1.7	0.974	bd1	0.14	0.250	0.04	0.24	0.21	0.034	-	1
16	3.0	2.9	-	4.10	4.1	2.833	bd1	0.14	0.318	0.05	0.31	0.19	0.031	-	1
21	4.8	4.6	-	4.00	5.9	4.117	0.8	0.20	0.765	0.09	0.56	0.22	0.025	0.90	1
22	33.2	32.2	5.20	4.50	0.7	0.266	0.9	0.16	0.006	0.06	0.60	bd1	0.010	-	1
23	6.0	6.2	-	4.90	bd1	bd1	0.6	0.14	0.005	0.03	0.60	bd1	0.019	-	1
29	1.7	2.6	-	5.10	0.5	0.398	1.2	0.24	0.045	0.06	0.60	0.11	0.048	1.12	1
TOTAL PRECIP 108.3 116.0															
NO. OBS. 8 8 - 8 8 - 8 8 8 8 8 -															
A. MEAN 13.5 14.5 - 4.45 1.9 1.157 - 0.14 0.183 0.06 0.51 0.14 0.026 -															
STD. DEV. 14.8 16.4 - 4.46 2.1 1.504 - 0.07 0.264 0.03 0.29 0.10 0.012 -															
MINIMUM 1.7 2.6 - 4.00 bd1 bd1 - bd1 0.005 0.02 0.12 bd1 0.010 -															
MAXIMUM 39.6 46.6 - 5.10 5.9 4.117 - 0.24 0.765 0.12 1.06 0.24 0.048 -															
P.W. MEAN - 4.59 1.1 0.530 - 0.10 0.093 0.04 0.38 0.11 0.020															
PRECIP TYPE															
T - TRACE AMOUNT															
1 - RAIN															
2 - SNOW															
3 - MIXED															
4 - UNCERTAIN															

DAY() - DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

KEJIMKUJIK

MAY 1980

DAY	AIR CONCENTRATIONS (10^{-6}gm^{-3})					GAS SO ₂
	PARTICULATE					
	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-
5	-	-	-	-	-	-
6	-	-	-	-	-	-
7	-	-	-	-	-	-
8	1.15	bd1	bd1	bd1	bd1	bd1
9	5.74	0.96	bd1	0.27	1.23	1.9
10	7.55	1.92	0.28	0.35	1.54	1.5
11	11.43	2.63	0.39	0.48	2.88	4.1
12	9.25	1.55	bd1	0.14	2.39	2.9
13	0.36	0.18	bd1	bd1	bd1	bd1
14	1.58	0.30	bd1	0.07	0.81	bd1
15	2.70	0.22	bd1	0.06	bd1	bd1
16	1.71	0.22	bd1	0.56	bd1	1.1
17	1.38	0.21	bd1	0.06	0.35	bd1
18	2.58	0.33	bd1	0.09	bd1	bd1
19	2.25	bd1	bd1	bd1	bd1	bd1
20	0.61	0.24	bd1	0.10	bd1	bd1
21	1.81	0.32	0.25	0.18	0.33	bd1
22	2.01	0.40	bd1	0.10	0.70	1.3
23	0.55	0.21	bd1	0.11	0.29	1.0
24	0.91	0.23	0.28	0.16	0.26	1.4
25	0.76	0.19	0.26	0.14	0.28	1.9
26	0.37	bd1	bd1	bd1	bd1	1.1
27	0.39	bd1	bd1	0.07	bd1	0.9
28	0.72	bd1	bd1	bd1	bd1	1.0
29	0.91	0.24	bd1	0.10	bd1	0.8
30	1.26	0.35	bd1	0.06	0.26	1.3
31	1.97	0.47	0.56	0.32	0.38	bd1

bd1 - BELOW DETECTION LIMIT

NO. OBS.	24	24	-	24	24	24
A. MEAN	2.50	0.47	-	0.14	0.49	0.9
S.D.	2.95	0.66	-	0.15	0.78	1.1
MIN.	0.36	bd1	-	bd1	bd1	bd1
MAX.	11.43	2.63	-	0.56	2.88	4.1

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

DAY	AMOUNT		FIELD	LAB	(10 ⁻³ g l ⁻¹)								TOT P	ION BAL. RATIO +VE/-VE	PRECIP TYPE
	STD (mm)	COLL (mm)			SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺			
3	5.8	5.6	-	4.20	1.8	1.682	0.6	0.34	0.165	0.07	0.50	0.10	0.009	1.45	1
8	24.0	23.8	4.30	4.10	3.6	2.036	0.4	0.27	0.572	0.05	0.20	0.12	0.054	1.19	1
11	1.2	0.4	-	-	11.7	-	3.2	1.20	-	0.30	-	-	-	-	1
19	3.4	2.3	-	4.00	5.0	2.036	1.1	0.30	0.219	0.10	-	-	0.016	-	1
31	1.6	1.4	-	3.70	10.9	8.455	1.0	0.88	-	0.19	-	-	-	-	1
TOTAL PRECIP	36.0	33.5													
NO. OBS.	5	5	-	4	5	4	5	5	-	5	-	-	-	-	-
A. MEAN	7.2	6.7	-	3.96	6.6	3.552	1.3	0.60	-	0.14	-	-	-	-	-
STD. DEV.	9.6	9.8	-	4.21	4.4	3.273	1.1	0.42	-	0.10	-	-	-	-	-
MINIMUM	1.2	0.4	-	3.70	1.8	1.682	0.4	0.27	-	0.05	-	-	-	-	-
MAXIMUM	24.0	23.8	-	4.20	11.7	8.455	3.2	1.20	-	0.30	-	-	-	-	-
P.W. MEAN			-	4.07	4.0	2.272	0.6	0.34	-	0.07	-	-	-	-	-

PRECIP TYPE

T - TRACE AMOUNT

- 1 - RAIN
- 2 - SNOW
- 3 - MIXED
- 4 - UNCERTAIN

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

KEJIMKUJIK

JUNE 1980

AIR CONCENTRATIONS (10^{-6}gm^{-3})
PARTICULATE

DAY	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Na ⁺	NH ₄ ⁺	GAS SO ₂
1	20.84	2.77	0.67	0.76	4.71	bd1
2	1.09	0.32	0.25	0.13	0.27	bd1
3	1.62	0.43	bd1	0.14	bd1	1.6
4	1.02	0.21	bd1	0.20	bd1	bd1
5	0.80	0.18	bd1	0.20	bd1	bd1
6	0.74	0.21	bd1	0.17	bd1	bd1
7	3.80	1.58	bd1	0.17	1.26	1.8
8	2.62	0.30	bd1	0.15	bd1	1.9
9	2.37	0.88	1.48	1.27	0.54	1.9
10	1.45	0.32	0.33	0.19	bd1	bd1
11	2.90	1.31	bd1	0.18	0.46	1.1
12	3.88	0.81	0.31	0.13	0.66	0.9
13	2.91	0.49	bd1	0.06	0.48	2.2
14	1.90	0.25	bd1	bd1	0.33	1.3
15	4.70	0.69	bd1	0.37	0.93	2.1
16	1.68	0.22	bd1	0.07	bd1	bd1
17	0.50	0.25	0.31	0.15	bd1	0.8
18	0.33	0.21	0.48	0.24	bd1	bd1
19	1.14	0.89	0.23	0.23	bd1	0.7
20	0.95	0.36	bd1	0.12	bd1	1.9
21	2.53	1.02	0.51	0.49	0.36	0.8
22	1.17	0.22	bd1	bd1	bd1	bd1
23	4.25	0.58	bd1	0.13	0.90	2.3
24	9.17 *	1.86	bd1	0.11	3.02	4.0
25	11.76 *	1.54	bd1	0.21	3.75	-
26	5.68 *	1.24	bd1	0.34	0.70	-
27	0.73 *	0.46	0.65	0.53	bd1	-
28	1.42 *	0.78	0.27	0.14	bd1	-
29	2.74 *	0.38	bd1	bd1	0.47	-
30	9.34 *	1.92	12.24	0.56	1.18	-

bd1 - BELOW DETECTION LIMIT

NO. OBS.	30	30	-	30	30	24
A. MEAN	3.53	0.76	-	0.25	0.67	1.1
S.D.	4.30	0.65	-	0.26	1.16	1.1
MIN.	0.33	0.18	-	bd1	bd1	bd1
MAX.	20.84	2.77	-	1.27	4.71	4.0

* BLANK IS GREATER THAN 2 STANDARD DEVIATIONS ABOVE MEAN

PRECIPITATION CONCENTRATIONS

(10^{-3}g l^{-1})

(10 ⁻³ g l ⁻¹)														ION BAL.	
DAY	AMOUNT STD (mm)	COLL (mm)	PH FIELD LAB	SO ₄ ⁼	NO ₃ ⁻	Cl ⁻	Ca ⁺⁺	NH ₄ ⁺	Mg ⁺⁺	Na ⁺	K ⁺	TOT P	RATIO +VE/-VE	PRECIP TYPE	
2	1.5	1.6	-	3.90	6.5	-	0.6	0.35	0.08	-	-	-	-	1	
3	13.7	14.0	4.40	4.50	1.9	0.664	0.4	0.18	0.099	0.01	0.40	0.10	0.026	1.09	1
4	9.0	9.1	4.80	5.00	0.5	bd1	0.1	0.14	0.003	0.01	bd1	0.05	0.011	-	1
7	17.4	16.3	4.20	4.10	2.4	1.372	0.6	0.20	0.140	0.05	0.40	0.10	0.004	1.38	1
14	20.4	19.9	4.40	4.20	2.8	1.151	0.2	0.17	0.193	0.01	bd1	0.09	0.002	-	1
20	15.6	15.6	4.60	4.60	1.0	0.514	0.1	0.12	0.045	0.03	0.16	0.03	0.004	1.33	1
30	8.0	7.5	4.50	4.30	2.0	1.284	0.1	0.16	0.175	0.03	0.16	0.06	0.016	1.20	1
TOTAL PRECIP	85.6	84.0													
NO. OBS.	7	7	6	7	7	6	7	7	6	7	6	6	6	-	
A. MEAN	12.2	12.0	4.45	4.26	2.4	0.831	0.3	0.19	0.109	0.03	0.19	0.07	0.011	-	
STD. DEV.	6.5	6.3	4.79	4.41	2.0	0.533	0.2	0.08	0.075	0.03	0.18	0.03	0.009	-	
MINIMUM	1.5	1.6	4.20	3.90	0.5	bd1	0.1	0.12	0.003	0.01	bd1	0.03	0.002	-	
MAXIMUM	20.4	19.9	4.80	5.00	6.5	1.372	0.6	0.35	0.193	0.08	0.40	0.10	0.026	-	
P.W. MEAN			4.41	4.31	2.0	0.889	0.3	0.17	0.117	0.02	0.19	0.08	0.009		

PRECIP TYPE T - TRACE AMOUNT

- 1 - RAIN
- 2 - SNOW
- 3 - MIXED
- 4 - UNCERTAIN

DAY()-DENOTES A MULTIPLE DAY SAMPLE OF DURATION SHOWN
IN BRACKETS AND IS NOT INCLUDED IN STATISTICS

Doc. No.	Corporate Author:	
CA	Canada. Atmospheric Env. Ser.	
EP 24	Series:	AQRB-81-026-T
83	Title:	Results of The Can.'s
R6T	Air & Precip. Monitoring...	
Date Due	Borrower's Name	
APR 23 1984	Mayda JUL 17 1984	

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